

**Annual Report of the WHO Collaborating Center for the Family of
International Classifications for North America,
October 2009 – September 2010**

Marjorie S. Greenberg, National Center for Health Statistics, CDC
Mea Renahan, Canadian Institute for Health Information
Jeff Latimer, Statistics Canada

Abstract:

The WHO Collaborating Center for the Classification of Diseases for North America was established in 1976 to represent the U.S. and Canada in international activities related to study and revision of the International Classification of Diseases and Health Problems (ICD). In 1993, the Collaborating Center also assumed responsibility for work in North America on the International Classification of Impairments, Disabilities and Handicaps, now the International Classification of Functioning, Disability and Health (ICF). The North American Collaborating Center (NACC) was re-designated in 2003 as a WHO Collaborating Center for the Family of International Classifications (WHO-FIC) and again in 2008. The Collaborating Center is located at the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention, in the U.S. Department of Health and Human Services (DHSS), and works in close collaboration with the Canadian Institute for Health Information (CIHI) and Statistics Canada. Designation is in cooperation with the Pan American Health Organization.

The North American Collaborating Center continues to be very active in promoting the development and use of ICD and ICF in both the United States and Canada and in supporting the work of the WHO-FIC Network. This annual report documents activities during the past year associated with the NACC Terms of Reference and includes a work plan for 2010-2014.

Introduction

The North American Collaborating Center continues to be very active in promoting the development and use of ICD and ICF in both the United States and Canada and in supporting the work of the WHO-FIC Network. This annual report documents activities during the past year associated with the NACC Terms of Reference and includes a work plan for 2010-2014. Of particular note are the following:

- Final 2007 mortality data published by NCHS in May 2010; preliminary 2008 data planned for late September 2010.
- Provision of training courses in ICD-10 underlying and multiple cause-of-death coding for U.S. mortality coders
- Development by NCHS of an on-line electronic interactive basic multiple cause coding course on CD ROM and available on the Internet
- Online training module with tutorial on fetal death distributed to all States in U.S.
- Publication by Statistics Canada of mortality (cause-of-death) data for 2006, with publication of 2007 cause- of- death data planned for Fall 2010
- Provision of training courses in ICD-10 underlying and multiple cause-of-death coding for Canadian mortality coders
- Continued expansion of the national Coroner/Medical Examiner Database of standardized information on circumstances surrounding deaths reported to coroners and medical examiners in Canada
- Production of 2010 version (FY 2011) of ICD-9-CM and coding guidelines, available on the web and as a CD ROM
- Production of 2010 version of ICD-10-CM and coding guidelines, available on the web.
- Posting of updated general equivalence mappings between ICD-10-CM and ICD-9-CM on the NCHS website at the end of 2009.
- Implementation of v2009 of ICD-10-CA and CCI completed.
- Updated all existing education materials to Version 2009 of ICD-10-CA/CCI. All courses are developed and delivered in both English and French. A combination of self directed learning, e-Learning and face to face workshops are used in the production of all educational materials. Product types include a wide variety of topics. Tips for coders are posted to the Coders' Webpage on a biweekly basis.
- The 2009 version of the Canadian Coding Standards for ICD-10-CA and CCI are available on the CIHI website. This manual is available in English and French.
- Ongoing support by CIHI of an on-line Coding Query Service. Since 2001, this Service has responded to over 14,000 queries. A fully bilingual (English/French) service was established in 2006.
- Production of CMG+ for in-patient grouping and CACS for ambulatory care grouping, new grouping methodologies based solely on data collected using ICD-10-CA and CCI and associated case costing data. Products are updated annually.

- Conduct of four major and several ad hoc chart re-abstraction studies – these are part of a five year CIHI plan to audit the quality of in-patient and ambulatory care data
- Continued provision of support and leadership for the awareness, use and implementation of ICF across U.S. and Canada
- CIHI held a Pan Canadian ICF Knowledge Sharing Collaborative in Toronto March 10 – 11, 2010 for ICF users in Canada
- 15th North American Collaborating Center Conference on ICF convened in Washington, D.C. on June 23-24, 2010.
- Presentation by NCHS, during the weeks of December 1-3, 2009, and June 8-10, 2010 of the second and third iterations of an "ICF Web Seminar Series," a modular series of lectures presenting introductory- and intermediate-level material about the ICF and how to apply it in various settings.
- Continued preparation and distribution by NCHS of the periodic NACC ICF Newsletter.
- NCHS facilitation and assurance of ongoing sponsorship for incorporation of ICF and ICF-CY into the National Library of Medicine (NLM) Unified Medical Language System.
- The NACC has undertaken the planning and hosting of the WHO-FIC Network Annual Meeting 2010 to be held in Toronto, Canada 16 – 22 October, with CIHI taking the lead.
- NACC representatives serve on all WHO-FIC Committees and Reference Groups and lead several of them.
- Continued leadership by NACC Head of the WHO-FIC Council, serving as Co-Chair for 2009 - 2011; the NACC Head also co-chairs the Council's Small Executive Group.
- Continued NACC (CIHI) leadership as Co-Chair and Secretariat of the WHO Update and Revision Committee (URC) with responsibility for updating ICD-10 and continued work with WHO to improve reporting and functionality of ICD-10+ platform. A total of 101 update proposals for discussion in Toronto have been reviewed and posted for comment on the platform by the Secretariat.
- Continued leadership by NACC Head as Co-Chair of the WHO-FIC Education Committee (EC).
- Continued leadership by NACC (NCHS) as Co-Chair of the Family Development Committee (FDC).
- Continued NACC leadership (NCHS) as co-chair of the WHO Mortality Reference Group (MRG) and participation by Statistics Canada.
- Service by NACC (NCHS and CIHI) representatives on the FDRG Secretariat as chairs of Task Group 1 (Users Guide/CIHI), Task Group 2 (ICF Updates/NCHS) and Task Group 7 (Environment/CIHI).
- NACC (NCHS, CIHI, Statistics Canada) membership on the Bridging Task Group of FDRG. This group provides an opportunity to build a partnership and good working relationships between the Washington City Group and the FDRG.

- Participation by NACC representatives at mid-year meetings of WHO-FIC Network Committees and Reference Groups in Cologne, Germany; Madrid, Spain and Leiden, Netherlands.
- Continued leadership by NCHS and participation by Statistics Canada, in the International Collaborative Effort (ICE) on Automating Mortality Statistics, including convening a meeting of the Planning Committee in Cologne, Germany in March 2010.
- Continued leadership by NCHS of the International Collaborative Effort (ICE) on Injury Statistics, including meetings in October 2009 and September 2010.
- Hosting by NCHS of a Partners of the Americas Fellow from El Salvador in June and July 2010, sharing information and educational experiences regarding use and implementation of ICD and ICF and a variety of data standards and national health information policy initiatives.
- Hosting by CIHI of representatives from Netherlands and UK, sharing Canada's experiences with implementing the ICD and building a variety of databases, grouping methodologies, health indicators and numerous other end-user instruments and reports.
- Representation by CIHI on all nine Canada Health Infoway working groups and Advisory Committees to facilitate incorporation of classification standards and secondary use data into the electronic health record (eHR).
- Representation by NCHS in HL-7 and ANSI ASC X-12 to facilitate incorporation of standards for ICD-10 code sets.
- Facilitation by NCHS of development of an International Vital Records Functional Profile at Health Level 7.
- Representation by NCHS and CIHI on the IHTSDO Mapping Project and Mapping Special Interest Groups (SIG) to facilitate incorporation of classification standards and mapping of SNOMED-CT to ICD-10 into the electronic health record (eHR). CIHI also participates on the SIGs for Primary Care, Implementation, Education and Tooling. NCHS and CIHI representatives (either in-person or by phone) attended the October 2009 IHTSDO meetings in Bethesda, MD, and the May 2010 meetings in Denmark and will attend the October 2010 meetings in Toronto.
- Participation in Revision Steering Group for ICD-11 and service on several Topical Advisory Groups.

Title of Center:

WHO Collaborating Center for the Family of International Classifications for North America (NACC)

Annual Report Year: October 1, 2009- September 30, 2010

Address:

National Center for Health Statistics (NCHS)
Centers for Disease Control and Prevention (CDC)
3311 Toledo Road, Room 2413
Hyattsville, Maryland 20782
USA
<http://www.cdc.gov/nchs/about/otheract/icd9/nacc.htm>

Head of the Center:

Marjorie S. Greenberg
Chief, Classifications and Public Health Data Standards
NCHS, CDC

Terms of reference of the Center:

- a) To promote the development and use of the WHO family of international classifications (WHO-FIC) including the International Statistical Classification of Diseases and Health Problems (ICD), the International Classification of Functioning, Disability and Health (ICF), and other derived and related classifications and to contribute to their implementation and improvement in the light of practical experience by multiple parties as a common language
- b) To contribute to the development of methodologies for the use of the WHO-FIC to facilitate the measurement of health states, interventions and outcomes on a sufficiently consistent and reliable basis to permit comparisons within countries over time and within and between countries at the same point in time. This includes the creation of comparable lists, correspondence tables, and comparability studies.
- c) To support the work of the various committees and work groups established to assist WHO in the development, testing, implementation, use, improvement, updating and revision of members of the WHO-FIC
- d) To study aspects related to the structure, interpretation and application of members of the WHO-FIC including those concerning taxonomy, linguistics, terminology and nomenclature
- e) To network with current and potential users of the WHO-FIC and act as a reference center (e.g., clearinghouse for good practice guidelines and the resolution of problems) for information about the WHO-FIC and other health-related classifications, including:
 - the availability, suitability and applicability of the classifications for different purposes

- coding practices
 - availability of tools for implementation
 - data analysis and interpretation
- f) To prepare teaching materials and to organize and conduct training courses on the implementation and use of the WHO-FIC. To contribute to the development of common international training tools and Internet-based applications by preparing translations and adaptations of the tools
- g) To assist WHO Headquarters and the Regional Offices in the preparation of members of the WHO-FIC and other relevant materials in the English language and to act as a reference centre for that language on all matters related to the WHO-FIC
- h) To provide support to existing and potential users of the WHO-FIC and of the data thus derived in North America and other English-speaking countries
- i) To work on at least one related and/or derived member of the WHO-FIC Specialty-based adaptations
- Primary care adaptations
 - Interventions/procedures
 - Injury Classification (ICECI)
 - Service Classification
- j) To participate in the quality assurance procedures of the WHO-FIC classifications regarding norms for use, training and data collection and application rules
- k) To present periodic reports of the Center's activities to the annual meetings of Heads of WHO Collaborating Centres for the Family of International Classifications (WHO-FIC)

Implementation of the work plan in relation to the terms of reference

The National Center for Health Statistics (NCHS) works in close collaboration with the Canadian Institute for Health Information (CIHI) and Statistics Canada to carry out the work plan of the North American Collaborating Center in the United States and Canada. (See attached for detailed descriptions.)

Collaboration between the Center and WHO

- The NACC will host the 2010 WHO-FIC Network Annual Meeting in Toronto, Canada 16 – 22 October.
- The NACC delegation of twelve persons from the U.S and Canada participated in the 2009 annual meeting of the WHO-FIC Network in Seoul, Korea from October 10-16.
- WHO staff (HQ) participated in several ICD-related meetings organized by the North American Collaborating Center and the German Collaborating Center in February - March 2010. These included meetings of the ICE on Automated Mortality Statistics Planning Committee, the Mortality Reference

Group, Morbidity Reference Group and the Education Committee and its Joint Collaboration with IFHRO.

- Participation by NACC representatives (CIHI and NCHS) and WHO staff in mid-year meeting of FDRG on June 1-2 and meeting of FDRG Task Group 1 on Coding Guidelines on June 3-4 in Madrid, Spain. The Chair of Project 1 Task Group convened a number of teleconference meetings before and after the Madrid meeting. The Chair of Task Group 2 on ICF Updates organized the update proposals and other review activities.
- The NACC Head Co-Chairs the WHO-FIC Network Council and its Small Executive Group (SEG). The FDC, URC and MRG Co-Chairs also serve on the Council. The Council held teleconferences in February, April and September 2010, and the SEG held bi-monthly teleconferences. The Council monitors and advances the Network Strategy and Work Plan.
- The NACC Head co-chairs the work of the Education Committee (EC), which assists and advises WHO in improving the level and quality of use of the WHO-FIC in Member States. The Head also facilitates the work of the Joint Collaboration (JC) with the International Federation of Health Records Organizations (IFHRO), a non-governmental organization in official relations with WHO. WHO HQ and PAHO staff participate in the work, conference calls and meetings of the EC and JC.
- NACC Head and NCHS Morbidity Classification lead met with PAHO staff in May 2010 to discuss increased collaboration with the Health Information and Analysis Project. The Partners of the Americas Fellow also was hosted by PAHO for a day in July.
- NACC representatives and other North American experts participated in review of the ICD-10 and ICF web-based training tools under development by WHO and the WHO-FIC Network.
- NACC serves as the Co-Chair for the WHO-FIC Mortality Reference Group.
- NACC (CIHI) serves as Co-Chair and Secretariat (ICD) for the WHO-FIC Update and Revision Committee (URC).
- NACC (CIHI and NCHS) serve on the Secretariat for the WHO-FIC Functioning and Disability Reference Group (FDRG).
- The NACC Head and the URC Chair are members of the ICD Revision Steering Group (RSG), and participate in monthly teleconferences. The in-person meeting of the RSG was postponed due to the disruption of European air travel caused by volcanic ash but has been rescheduled for September 2010.
- US and Canadian representatives of the NACC and respective countries serve on several Topic Advisory Groups (TAGs) of the ICD-11 Revision process.
- Participation by NACC representatives (CIHI and NCHS) in WHO Topic Advisory Group (TAG) on Quality and Patient Safety Meeting on June 1-2, 2010 in New York.
- Leadership by NACC (NCHS) as co-chair of Mortality TAG.
- NCHS facilitated and participated in meetings between WHO and the National Center for Complementary and Alternative Medicine (NCCAM) in March and August 2010, regarding development of the International Classification of

Traditional medicine (ICTM).

- NACC (NCHS) representatives continue to support the contract between WHO and the National Library of Medicine (NLM), under which ICF and ICF-CY have been incorporated into the NLM's Unified Medical Language System.
- The WHO-FIC Network Annual Meeting 2010 is facilitating WHO's collaboration activities with the International Health Terminology Standards Development Organization (IHTDO) and the International Methodology Consortium for Coded Health Information (IMECCHI).

No financial support is provided to the Center by WHO. Adequate staffing and related resources are required at WHO HQ to assure successful accomplishment of the WHO-FIC objectives.

Collaboration with other WHO Collaborating Centres

The NACC collaborates actively with the other members of the WHO-FIC Collaborating Centre network, as follows:

- The Australian, Dutch, German, Italian, Japanese, Korean (under designation), North American, Portuguese language (Brazil), United Kingdom (under re-designation) Centres participated in the February 2010 meetings of the Education Committee and Joint Collaboration.
- Several of the above Centres, as well as the French Centre, participated in the ICE on Automation Planning Committee meeting and the mid-year meeting of the Mortality Reference Group.
- Centres participating in the March 2010 Morbidity Reference Group meeting were Australian, French, German, Italian, North American, Nordic, Portuguese language (Brazil), and Japan.
- Centres participating in the July 2010 meeting of the Family Development Committee to further development of an international interventions classification were Australian, Chinese, Dutch, French, German, Italian, Korean and North American,
- The NACC is working closely with the German Collaborating Centre/ICF Research Branch on the web-based training tool for ICF.
- Several Centres participate in conference calls convened by the Education Committee and FDRG Project 1 Task Group on Coding Guidelines and Project 2 Task Group on ICF Updates.

Term of reference a) Major Activities

1. Promote the development and use of ICD-10 for mortality statistics in the United States, including development of training materials and conduct of courses, revision of U.S. Standard Certificates and movement toward an electronic death registration system

During 2009 - 2010, the National Center for Health Statistics (NCHS) continued its regular production of mortality statistics using ICD-10, including electronic publication of preliminary mortality data for 2007, with release of final 2007 data in May 2010. Preliminary 2008 mortality data is scheduled for release by the end of September 2010. Regular production of mortality data includes reports, CD-ROMs, interactive databases (WONDER), and statistical tables published on the NCHS mortality website at <http://www.cdc.gov/nchs/about/major/dvs/mortdata.htm>. Mortality data include general mortality, infant mortality, leading causes of death, life tables, underlying and multiple causes of death.

NCHS conducted basic multiple cause-of-death coding courses in October 2009 and September 2010, and a basic underlying cause-of-death coding course in Minneapolis, MN in April 2010. NCHS has developed an on-line electronic interactive basic multiple cause coding course on CD-ROM, which currently is available on the Internet. An online training module also was distributed to all states, with a tutorial on fetal death coding.

Revision of the U.S. Standard birth and death certificates and the report of fetal death are complete, including specifications, file layout, handbooks and instruction manuals; these revised certificates are being implemented by the States over a period of several years. Changes in the U.S. Standard Certificate of Death include a checkbox item on whether smoking contributed to death, a checkbox item on the pregnancy status of female decedents, a checkbox item on the traffic status of the decedent (e.g. pedestrian, driver, etc), and more detailed instructions to the funeral director and to the medical certifier to improve the accuracy of reporting demographic and medical items. Over-arching considerations for the death certificate included improving data quality, anticipating electronic death registration, and adapting to ICD-10. The U.S. Standard Report of Fetal Death has been revised to include some new items and a restructured cause-of-death section. Worksheets have been developed to assist in data collection for birth certificates and fetal death reports. Changes in the U.S. Standard certificates and reports are made in an effort to improve existing data, to collect information not previously available, and to adapt to changes in the administrative, social, and legal environment. Implementation of the revised birth and death certificates was originally planned for 2003. However, only four States and New York City implemented the revised death certificate in 2003. In 2010, a total of 35 States, the District of Columbia, and New York City have implemented the revised death certificate. Implementation for the remaining States is expected to be complete no later than 2013.

Work on Electronic Death Registration Systems (EDRS) in the U.S. continues to progress. When implemented, EDRS will require inputs from two sources – the funeral director, who provides demographic information about the decedent based on information from an informant, usually a family member; and the attending physician (or medical examiner, coroner), who completes the medical certification of death. EDRS has the potential of providing mortality data of higher quality (because of on-line edits and querying) and better timeliness than the current paper-based systems. EDRS is still in the process of implementation and development in the United States, under the guidance of an Oversight Committee comprised of key stakeholders, including NCHS, the Social Security Administration (SSA), the National Association for Public Health Statistics and Information Systems (NAPHSIS), and state vital registration systems. Currently, 29 states, New York City and the District of Columbia have developed an EDRS, although most are still in the implementation phase and are not yet registering all deaths electronically. Fourteen (14) others are in development or in the planning stages. Additional information on this project is available on the NAPHSIS website at <http://www.naphsis.org>.

The first two of the series of the 1999-2001 US decennial life tables were published in August, 2008: "US Decennial Life Tables for 1999-2001, United States Life Tables," National Vital Statistics Reports, Volume 57, No. 1; and "US Decennial Life Tables for 1999-2001, Methodology of the United States Life Tables," National Vital Statistics Reports, Volume 57, No. 4. The series will be completed with the publication of two other reports, one focusing on national life tables by cause of death and the other on state-specific life tables.

Term of reference a) Major Activities

2. Promote the use of ICD-10 through technical assistance by U.S. to other countries

In 2010, NCHS staff provided technical assistance to the IRIS group to ensure that the IRIS software will work successfully with the NCHS automated coding system (MMDS). The IRIS software is designed to facilitate the use of the MMDS in non-English-speaking countries. Some of this work with the IRIS group has focused on creating entity reference numbers (ERNs) for every ICD-10 code; other activities have centered on testing IRIS software in conjunction with the MMDS. In addition, NCHS staff have worked with the MRG on updating the ACME decision tables to ensure that all relevant diseases are included in the decision tables. The decision tables were designed for use in the US and so originally only covered conditions that were reasonably common in the US.

As use of the MMDS and IRIS spread, future work will focus on testing IRIS and MMDS for use in regions with different disease patterns; the results of this testing in turn will lead to further additions to the decision tables. Some of these changes have already resulted from the development of an automated coding system in Mexico. The Mexican WHO-FIC Collaborating Center developed an extensive list of questions and proposed changes to the decision tables that reflected in part the different disease patterns in Mexico. The MRG has evaluated the Mexican proposals and accepted many of them. NCHS is developing a new project to improve vital registration and statistics systems in developing countries. The assistance to countries will include ICD cause-of-death coder training and, in some cases, the installation of automated coding software.

Term of reference a) Major Activities

3. Promote the use of ICD-9-CM for morbidity applications in the United States

Since the 2009 annual meeting in Seoul, Republic of Korea, NCHS, in collaboration with the Centers for Medicare and Medicaid Services (CMS), has held two meetings of the ICD-9-CM Coordination and Maintenance Committee (March 2010 and September 2010). Information regarding the diagnosis proposals and a summary of the public discussion appear on the NCHS website at:

http://www.cdc.gov/nchs/icd/icd9cm_maintenance.htm. Information regarding the procedure proposals and a summary of the public discussion appear on the CMS website at:

http://www.cms.gov/ICD9ProviderDiagnosticCodes/03_meetings.asp#TopOfPage

The October 1, 2010 diagnosis revisions to ICD-9-CM were posted on the NCHS website in June 2010 (http://www.cdc.gov/nchs/icd/icd9cm_addenda_guidelines.htm) The ICD-9-CM CD ROM containing the October 1, 2010 revisions is available from the Government Printing Office. There are 129 new diagnosis and 1 new external cause code and 22 new procedure codes, which identify several important clinical concepts and procedures that were not previously captured in ICD-9-CM. These include revisions to the novel H1N1 influenza virus, expanded detail for aortic ectasia, expanded detail for congenital anomalies of the uterus, new codes for stuttering and fluency disorders, and new codes for ABO, Rh and non-ABO incompatibility due to the transfusion of blood and blood products. Several new procedure codes have been created for: reverse total shoulder replacement, implantation/replacement of carotid sinus stimulator device (total, leads, and generator), additional codes for drug-eluting stents.

Twice yearly updates of ICD-9-CM (April and October) have been required since 2005 to recognize new technology under the inpatient prospective payment system. None of the proposals received during the 2010 cycle met the criteria for an expedited April 2010 update (focus on new technology and limited to those that have a strong and convincing case). The Coordination and Maintenance Committee held discussions during its September 2009 and March 2010 meetings on whether and when to discontinue updates to ICD-9-CM prior to implementation of ICD-10-CM and ICD-10-PCS on October 1, 2013 (see below).

NCHS continues to maintain and release ICD-9-CM using a Folio-based search-engine product. While this textual, display-oriented representation has been a productive way to communicate ICD-9-CM to the medical record coding community, it does not easily support emerging national healthcare information efforts, including the NLM's UMLS Metathesaurus, the National Health Information Network (NHIN), and Electronic Health Record (EHR) systems.

Term of reference a) Major Activities

4. Develop, implement and promote the use of ICD-10-CM for morbidity applications in the United States

An “official” electronic distribution of ICD-10-CM is planned that will be in a machine-readable format, which would reduce the proliferation of divergent electronic ICD-10-CM variants within the industry. In addition to continued work on the beta version of the ICD-10-CM database, NCHS continues to update ICD-10-CM in keeping with updates that have been implemented in ICD-9-CM. A 2010 version of ICD-10-CM and general equivalence mappings with ICD-9-CM were posted on the NCHS website at the end of 2009. An updated version of ICD-10-CM and related files will be posted in December 2010.

The implementation of ICD-10-CM is linked with the administrative simplification provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA). The final rule was published on January 17, 2009 and established the implementation of ICD-10-CM and ICD-10-PCS for encounters/discharges on or after October 1, 2013.

Public discussions regarding freezing updates to ICD-9-CM and the ICD-10 code sets prior to October 1, 2013 were held during the September 2009 and March 2010 ICD-9-CM Coordination and Maintenance Committee meetings. NCHS and CMS will continue to update ICD-9-CM until such time that the Department of Health and Human Services designates the final year for updating of ICD-9-CM and ICD-10-CM/ICD-10-PCS and the restarting of the updating of ICD-10-CM and ICD-10-PCS. As of March 2010, the industry consensus is that the final updates for ICD-9-CM and ICD-10-CM/ICD-10-PCS will be October 1, 2011. Updating of the ICD-10 codes sets would resume, effective October 1, 2014.

Demands on NCHS, as the U.S. moves forward with implementing the ICD-10 code sets, have not allowed an opportunity to work more closely with WHO on validating differences between ICD-10 and ICD-10-CM that may have importance for the ICD-11 revision work, but we remain committed to advancing the work once the code set freeze becomes effective.

NCHS has provided WHO with ICD-10-CM for conversion to ClaML and use in the ICD Revision process

Term of reference a) Major Activities

5. Promote the development and use of ICD-10 for mortality statistics in Canada, including development and presentation of training courses

The following work is performed by Statistics Canada in support of this activity:

- Conduct training in ICD-10 mortality classification (coding) and in the use of MMDS, NCHS automated mortality classification software, in Canada (ongoing). A Basic Multiple Causes-of-Death Classification course was presented in June 2010.
- Provide updated ICD-10 specifications to provinces and territories for producing mortality (cause-of-death) data. Latest updates distributed in January 2010
- Receive demographic and cause-of-death data from provinces coded according to national (Statistics Canada) specifications (ongoing)
- Conduct quality control, promote querying for rare causes of death (ongoing)
- Undertake external edit checks (geographic, cause by sex and/or age, rare causes, eliminate duplicate records) (ongoing)
- Develop tables and release plans for final mortality data (ongoing)
- Released, as electronic publications, Causes of Death 2006, (May 2010), Leading Causes of Death 2006 (August 2010) and Summary List of Causes 2006, (July 2010)
- Participate in annual meetings of WHO-FIC Network
- Participate in WHO-FIC Mortality Reference Group and Update and Revision Committee (ongoing)
- Participate in WHO-FIC Education Committee and WHO-FIC – IFHRO Joint Collaboration (ongoing)
- Participate in ICE on Automated Mortality Statistics Planning Committee (ongoing);
- Continue development of a national Coroner/Medical Examiner Database (CCMED) of standardized information on circumstances surrounding deaths reported to coroners and medical examiners in Canada. Release of the 2006 Annual Report is scheduled for the fall 2010.

Term of reference a) Major Activities

6. Develop, implement and promote the use of ICD-10-CA and CCI for morbidity applications in Canada, including development and conduct of education programs, development of Canadian Coding Standards and multiple offerings for secondary use of this data.

The following work was performed by the Canadian Institute for Health Information (CIHI) in support of this activity:

- All provinces and territories using ICD-10-CA and CCI for morbidity data collection as of April 1, 2006. Country-wide adoption was initiated in 2001 and completed in 2006.
- Development and maintenance of education products related to ICD-10-CA/CCI including:
 - *Obstetrics—Moving Beyond the Basics* (webex conferences),
 - *What's New in Classifications for 2009* (webex conferences).
 - *Coding for Diabetes Part 1 and Part 2* (Self-Learning Programs [SLP] and eLearning),
 - *Acute Coronary Syndrome – Part 1 and Part 2* (SLP & eLearning),
 - *Classifying Post-Intervention Conditions*, (2SLPs with assessment),
 - *Moving Forward with Version 2009* (SLP with assessment).
 - *Applied ICD-10-CA/CCI Case Studies, Series 1 and 2* (SLP and eLearning)
 - *Applied Diagnosis Typing, Main Problem/Other Problem Assignment* (eLearning)
 - *Search Techniques for ICD-10-CA/CCI* (eLearning)
 - *Knee Replacement Surgery* (eLearning)
 - *Trending in ICD-10-CA and CCI* (eLearning)
 - *Meeting the Challenge: Supporting Your Coding Decisions (Workshop)*
 - *Classifying Post-Intervention Conditions: ICD-10-CA Code Assignment (SLP)*
 - *Post-Intervention Data Collection (Workshop)*
 - *Identifying Post-Intervention Events: Prefix 5 and 6 Assignment (SLP)*
 - *iCODE Case Studies (eLearning)*
 - *Moving through the Lower GI Tract with CCI (SLP and Workshop)*
 - *Coding Flaps and Grafts of Skin and Soft Tissue (e-Learning)*
- Maintenance of a Coders' Web page on the CIHI website with regular posting of coding tips.

All training materials are updated annually and are available in English, French or a bilingual format.

- On- line coding query service implemented in June 2001 with over 14,000 queries answered to date. A bilingual e-Query tool was implemented in September 2006.
- The 2009 version of the Canadian Coding Standards for ICD-10-CA and CCI posted to the CIHI is in effect until April 1, 2012. This manual is available in

English and French. Production of the Coding Standards is supported by the National Coding Advisory Committee with representation from all provinces and territories. Work is conducted both on-line and in face to face meetings on an annual basis.

- Implementation of v2009 of ICD-10-CA/CCI completed
- The National ICD-10-CA/CCI Electronic Products Advisory Committee provides advice to CIHI in the development of new, and enhancement of existing, ICD-10-CA and CCI electronic products. This committee meets, as required.
- Have worked closely with other countries (e.g., US and Australia), comparing additions made to their products, with those done in Canada.
- Collaborated with WHO by sharing our experiences in representing the classifications in XML. Provided WHO with both v2006 and v2009 of the ICD-10-CA and CIM-10-CA databases for conversion to ClAML and use in the ICD Revision process
- Secretariat of URC (ICD-10) continues to work closely with WHO to improve the web-based update platform built by WHO. The platform has recently been updated to include the 2010 version of ICD-10. A total of 101 proposals have been reviewed by the ICD secretariat to ensure complete submission of all required elements, and moved to 'Under discussion' status for subsequent review by members prior to the meeting in Toronto in October 2010.
- All 101 proposals reviewed by CIHI and Statistics Canada to provide the Canadian comments on the proposals
- Comparison of ICD-10 and CIM-10 to identify and rectify discrepancies has been completed and CIM-10-CA corrected accordingly.
- ICD-10-CA/CCI CMG+, an in-patient grouping methodology, plus RIW and ELOS and ACCS, an ambulatory care grouping methodology, are updated and comparative and trending reports published annually.

Term of reference a) Major Activities

7. Promote the development and use of the ICF in the United States

Since the 2009 WHO-FIC Network Annual Meeting in Seoul, the NACC has encouraged adoption and supported implementation of the ICF in the United States through activities related to Education, Informatics, and Scientific Publishing.

1) Education:

2010 NACC ICF Conference, Bethesda, Maryland, USA

The NACC has hosted a series of Conferences on the ICF and functional status classification during this decade, and even before ICF publication during the 1990s. These ICF Conferences have provided the opportunity for many clinicians, scientists, and students in the U.S. and Canada to report on their findings and innovative applications of the ICF. This series of conferences serves many educational purposes, and helps to expand knowledge and understanding about the ICF.

On June 23-24, 2010, NACC hosted the 2010 ICF Conference on the campus of the U.S. National Institutes of Health (NIH), in Bethesda, Maryland, outside Washington, D.C. The venue was the William H. Natcher Conference Center. The Poster Session was held in an atrium, which encouraged more open discussion about the ICF among poster authors and other registrants. Immediately following the ICF Conference, we conducted a Field Testing episode for the new ICF eLearning Tool.

The theme of this year's ICF Conference was "Enhancing Our Understanding of the ICF." About 85 persons attended on both days, including 16 Poster Session authors, about 10 of whom also delivered oral presentations about their posters. There was no charge for conference registration. Participants were from NIH and other government agencies, as well as from around the U.S. and Canada; guests from Japan, The Netherlands, and Taiwan also attended.

One unique feature of the 2010 NACC ICF Conference is that it was available in real-time for viewing as an NIH Videocast throughout North America. There is also an archived recorded version of that NIH Videocast available on the Internet for free viewing at any time by anyone around the world, which is now posted permanently on two NIH websites, noted below.

In keeping with our Collaborating Center's approach toward advocacy for implementing the ICF in the U.S., the primary sponsors for the NACC 2010 ICF Conference were the National Center for Health Statistics, CDC and the U.S. National Committee on Vital and Health Statistics (NCVHS). In

conjunction with other activities marking the 60th Anniversary of establishing the NCVHS, members and staff of the NCVHS participated in the planning and presentation of the ICF Conference. Dr. Justine Carr, the NCVHS Chair, joined Dr. Edward Sondik, NCHS Director, and Marjorie Greenberg, Head of the NACC and NCVHS Executive Secretary, to deliver the Welcoming Remarks.

Our Keynote Speaker was Rosaly Correa-de-Araujo, M.D., M.Sc., Ph.D., a cardiovascular pathologist who currently serves as Deputy Director for the Office on Disability within the U.S. Department of Health and Human Services (DHHS). In that Office, she spearheads the DHHS Community Living Initiative, in conjunction with the U.S. Department of Housing and Urban Development. The title of her Keynote Address was “The ICF and Contemporary Disability Research.”

On the first day of the 2010 ICF Conference, we presented a one-hour Tutorial emphasizing ICF coding, and a short introduction to the ICF eLearning Tool. We conducted an interesting Roundtable Discussion featuring four nationally recognized experts in aging research and gerontology, led by Professor Alan Jette from the Boston University School of Public Health. This Roundtable had been inspired by a set of [Editorials published during 2009 in the Journal of Gerontology: Medical Sciences, about expanding the use of ICF in gerontology](#). . Other topics covered on the first day included using ICF in eligibility determinations for state-based vocational rehabilitation programs in the U.S., an update on the “Health Professions Manual for ICF,” and applications of ICF in Speech-Language Pathology.

On the second day of the 2010 NACC ICF Conference, we had a presentation about ICF activities in Canada, delivered by Diane Caulfeild from the Canadian Institute for Health Information. This presentation covered the results of a meeting among members of the Canadian “ICF Knowledge Sharing Collaborative,” which convened March 10-11 in Toronto, and on which a separate poster has been prepared. The Toronto meeting utilized 6 structured panels to reach consensus on current and future approaches toward using the ICF generally, and specifically in Canadian health systems. The panels covered such topics as outcome measures, minimum data sets, mapping ICF and ICF-CY to other instruments or models of disablement, pediatrics and children’s rehabilitation, and adult rehabilitation.

Other topics addressed on the second day included two hour-long modules about the ICF-CY, focusing on “Theory and Practice” as well as “Applications;” the “Going Beyond Diagnosis” ICF training series utilized by a large commercial claims administration company in the U.S., and two modules on applications of the ICF in biomedical informatics. Our second day also incorporated two Poster Session viewing periods, and an hour devoted to oral presentations by some of our poster authors.

On the day following the 2010 NACC ICF Conference, under the auspices of the U.S. National Library of Medicine on the NIH campus, we conducted a formal Field Testing episode for the new WHO ICF eLearning Tool, according to the protocol established for the overall Field Testing initiative. In this way, NACC contributed to the growing data set reflecting pre- and post-test results associated with testers' completing the eLearning Tool as a "short course" in ICF coding.

The website links for the archived recorded versions of the NIH Videocast of the 2010 NACC ICF Conference are as follows:

Conference Day One, June 23, 2010:

<http://videocast.nih.gov/summary.asp?Live=9397>

Conference Day Two, June 24, 2010:

<http://videocast.nih.gov/summary.asp?Live=9398>

ICF Web Seminar Series

Another educational activity conducted by NACC since the Annual Meeting in Seoul includes two iterations of the popular "ICF Web Seminar Series." We conducted these series in December, 2009, and June, 2010. The Web Seminar Series involves three 90-minute lectures over 3 consecutive afternoons, available throughout North America without charge over a password-protected Internet site coupled with a conventional telephone conference call. The Web Seminar Series emphasizes ICF coding, and explicitly offers plenty of time for questions and answers. Each Web Seminar is available for retrospective viewing over the Internet for one year.

ICF Presentation at the 2010 National Conference on Health Statistics

On August 16, 2010, John Hough and Donna Pickett from NCHS presented a 90-minute Educational Session during the event entitled "National Conference on Health Statistics: Charting the Course," a biennial conference sponsored by the NCHS. The title of their presentation was "New Developments for the International Classification of Diseases (ICD) and the International Classification of Functioning, Disability and Health (ICF)." The ICF component was entitled "The Complementary Relationship Between the ICD and the ICF." It focused on not only the desirability, but also the necessity, of utilizing ICF coding in tandem with ICD coding. The main lecture point of the ICF component was that complementary relationships among concepts exist throughout statistics and epidemiology, such that moving toward health data systems that accentuate the complementarity between ICD and ICF not only makes sense, it might also be essential.

2) Informatics:

Unified Medical Language System

The Collaborating Center continues to work closely with WHO and the National Library of Medicine (NLM) to assure the inclusion in 2010 and 2011 of the ICF and ICF-CY as two of the electronic source vocabularies incorporated in the NLM's Unified Medical Language System (UMLS). The two classifications are freely available through the UMLS.

The UMLS provides the electronic structure and environment to pursue mappings, which in turn enables and promotes the "translation" of concepts from one vocabulary source to others. Including the ICF in the UMLS enables registered users around the world to investigate and engage in "mapping" or "electronic matching" of terms between the ICF and more than 100 other clinical classifications, vocabularies, and terminologies currently included in the UMLS.

Providing the ICF and ICF-CY in the UMLS substantially expands our collective capabilities for mapping the ICF beyond the rudimentary two-dimensional mapping strategies that many ICF users have conventionally pursued. This enhancement enables the handling of more complex multi-dimensional mapping strategies in an electronic medium in which results can be shared with multiple other users, if warranted.

Through ongoing provisional agreements, NACC and its American federal partners, along with NLM and WHO, are committed to continuing support for licensure and annual updating of the ICF and ICF-CY in the UMLS, tentatively through September, 2012.

3) Scientific Publishing:

During this reporting period, many professionals who have participated in NACC activities have been actively contributing to the compendium of ICF publications. When requested, Collaborating Center staff provides comments or information to these ICF researchers.

For informational purposes and to indicate the types of research and applications regarding ICF currently underway in North America, we have appended a list of selections from that compendium, published or released in scientific journals, periodicals, or books during this 2009-2010 reporting period. The first roster represents selected publications in which the first author was affiliated with an institution located in Canada. The second roster of citations represents the similar output among first authors affiliated with American institutions.

Term of reference a) Major Activities

8. Promote the development and use of the ICF in Canada

The following work was performed by the Canadian Institute for Health Information (CIHI) in support of this activity:

- CIHI continues to contribute ICF information and perspective to the development of the Federal Disability Reports (Rapport fédéral sur les personnes handicapées) for the federal government Office for Disability Issues.
- CIHI held a Pan Canadian ICF Knowledge Sharing Collaborative in Toronto March 10 – 11, 2010 for ICF users in Canada (see separate poster).
- CIHI presented on ICF to the Canadian Association of Paediatric Health Centres (CAPHC) in October 2010 and participated in a panel discussion on ICF at this conference
- CIHI presented a Webinar on ICF to the International Pediatric Rehabilitation Collaborative in April 2010
- CIHI supported a research grant submission on ICF and dementia
- CIHI continues to respond to a variety of inquiries for ICF support and information from various sectors across Canada .
- CIHI presented on the ICF Knowledge Sharing Collaborative to the NACC – ICF Conference in June 2010.
- CIHI representative is a member of the WHO-FIC Implementation and Education committees for ICF-related topics.
- CIHI representative leads Project 1: Principles of Use, Coding Rules and Guidelines Task Group of the Functioning and Disability Reference Group (FDRG). Coordinated six international teleconferences and a meeting of this group in Madrid, June 2010. A major document is being prepared for presentation to the FDRG at the WHO-FIC meeting in October 2010.
- A CIHI representative leads Project 7 – Environmental Factors.
- Collaborates with the National Center for Health Statistics in providing North American input to the use and implementation of ICF (ongoing)
- Participation in NACC ICF and WHO-FIC meetings (ongoing)
- Represent Canadian interests in the evaluation and enhancement of ICF (ongoing)
- Communicate Canadian activities through Canadian Network meetings and national presentations on ICF applications (ongoing)

Term of reference b) Major Activities

1. Develop comparability ratios for ICD-10 mortality statistics in the United States

Comparability studies are essential to understand the effects of implementing a new revision of the ICD. In the United States, the comparability study for mortality between ICD-9 and ICD-10 was carried out in two phases: a preliminary study based mainly on records processed through the automated coding systems, and a final comparability study based on all records in the study year 1996. In 2001, the preliminary comparability study was published based on a total of 1,852,671 records. The published report is available at <http://www.cdc.gov/nchs/products/pubs/pubd/nvsr/49/49-pre.htm>. The final comparability study is ongoing. The entire final double-coded comparability file is currently available for download at <http://www.cdc.gov/nchs/datawh/statab/unpubd/comp.htm> along with tables of final comparability ratios. NCHS staff continue to provide technical support to those analyzing trends that cross revisions of the ICD.

Term of reference b) Major Activities

2. Implement International Collaborative Effort (ICE) on Automating Mortality Statistics

The ICE on Automation was established by NCHS in 1995 to promote the comparability of mortality statistics through the application of automation. Statistics Canada also serves on the Planning Committee. Four plenary meetings of the mortality ICE were held in 1996, 1999, 2003 and 2008. This NCHS activity supports the objectives of the WHO-FIC Network and encouraged WHO to establish a number of working committees oriented to training and credentialing and to electronic products more generally. Under the ICE, the outline for an international curriculum in mortality medical coding oriented to automation was developed by the ICE Planning Committee and was implemented by NCHS in 2001.

The ICE Planning Committee met in March 2010 in Cologne, Germany. Much of the discussion focused on continuing enhancements to IRIS, the language-independent automated coding software, and to ensuring that IRIS and MMDS remain completely compatible. Other topics discussed at the meeting included plans for ICD-11, the timing of future updates to the automated systems, and growing interest in electronic death registration (EDR), including EDR tests in some countries. At a later date, it was agreed that the 2011 meetings of the ICE, MRG, and other groups will take place in Budapest, Hungary in late March/early April.

Term of reference b) Major Activities

3. Support and Participate in International Collaborative Effort on Injury Statistics

Separate and joint meetings of the International Collaborative Effort (ICE) on Injury Statistics and the Global Burden of Disease (GBD) Injury Expert Group were hosted by the Department of Global Health and Population at the Harvard School of Public Health in Boston on October 9-10, 2009. These meetings were funded by a grant from the World Bank Global Road Safety Facility. Most attendees from high-income countries supported their travel to the meetings using funding from their host agencies. The US National Center for Health Statistics sponsors the scientific coordination of the ICE on Injury Statistics. Lois Fingerhut serves as Chair of the ICE on Injury Statistics in her role as a consultant to NCHS (after retiring from the US federal government in January 2009). This NCHS activity supports the objectives of the WHO-FIC Network in regards to injury classification. The International Classification of External Causes of Injury (ICECI) is a related member of the WHO-FIC, and several Injury ICE participants serve on the Topical Advisory Group on Injuries and External Causes for ICD-11.

The majority of the time during the ICE meeting was dedicated to ongoing ICE projects including the development of injury mortality and morbidity indicators, the measurement of injury severity as a means to more accurately count serious injuries, and the development of indicators of injury outcome (or disability). In all, 30 people participated in the two days of meetings representing 13 countries and WHO's Violence and Injury Prevention Department. [See http://www.cdc.gov/nchs/injury/ice/ice_meetings.htm for a list of participants and the meeting's proceedings.]

Many Injury ICE participants are actively engaged in two related projects—the Global Burden of Disease methodologies for estimating the number of global injuries (see www.globalburdenofinjuries.org) and the development of ICD-11's two injury chapters. Both of these projects held meetings before and after the ICE meeting to allow for maximum participation of attendees.

The next Injury ICE meeting will take place in Swansea, Wales on September 19-20, 2010 in conjunction with the 10th World Conference on Injury Prevention and Safety Promotion taking place in London beginning on September 21. The meeting will focus on the development of nonfatal injury indicators and outcomes addressing the question-- What are the pros and cons of different approaches to measuring nonfatal injury? In addition, participants will learn about the new WHO Global Health Observatory and how injury data will be included. ICD-11 revision updates also will be provided followed by a half-day meeting on the development of the new external cause of injury chapter.

Term of reference b) Major Activities

4. Develop comparability ratios for ICD-10 mortality statistics in Canada

The Comparability of ICD-10 and ICD-9 for Mortality Statistics in Canada report (November 2005) is available at
<http://www.statcan.ca/bsolc/english/bsolc?catno=84-548-X>

A half-day presentation, “Assessing the Impact of the Implementation of ICD-10 on Canadian Mortality Trends”, designed to promote the use and understanding of comparability ratios through educational seminars and conference presentations has been developed in English and in French and will continue to be offered as requested (ongoing from 2003).

Statistics Canada staff continue to provide technical support to those analyzing cause-of-death trends that cross revisions of the ICD.

Term of reference c) Major Activities

Participation in WHO-FIC Committees and Reference Groups (Co-Chairs)

1. WHO-FIC Network Council

The Center Head and Co-Chairs of the URC, FDC and MRG participate on the Council for the WHO-FIC Network, which monitors and advances the Network Strategy and Work Plan and oversees the planning of the annual meeting. The Center Head began a third two-year term as co-chair of the Council following the 2009 Network meeting. During 2010, the Council held three teleconferences. As Council Co-Chair, the Head co-chairs the Council's Small Executive Group (SEG), which prepares documents and recommendations for Council discussion and approval. The SEG holds bi-monthly teleconferences.

2. WHO-FIC Implementation Committee

Canadian and U.S. representatives participate in working sessions of the WHO-FIC Implementation Committee during annual WHO-FIC Network meetings, comment on documents and have prepared papers for discussion by the Committee. During its mid-year teleconference, the Council approved the merger of the Education Committee and Implementation Committee as the Education and Implementation Committee.

3. WHO-FIC Education Committee

The Center Head has chaired and directed the work of the Education Committee (EC) since its inception in 1999 and was elected to a two-year term as Co-Chair of the Committee in 2008. The EC assists and advises WHO in improving the level and quality of use of the WHO Family of International Classifications (WHO-FIC) in Member States by developing a training and certification strategy for the WHO-FIC, identifying best training practices and providing a network for sharing expertise and experience on training. Representatives of NCHS, CIHI and Statistics Canada participate on the Committee. Other Canadian and U.S. representatives also participate in the work of the Committee, along with numerous other collaborating centres, countries and related organizations. The Head facilitated a Joint Collaboration (JC) with the International Federation of Health Records Organizations (IFHRO) to establish a training and certification program for ICD-10 mortality and morbidity coders in 2000 and serves as an ex-officio member. The JC held its first face-to-face meeting in Bethesda, MD in May 2005 and also communicates by e-mail and joint conference calls with the EC. During February 2010, the EC and JC met in Cologne, Germany to continue work on the international training program, review web-based training tools for ICD and ICF under development by WHO and the WHO-FIC Network and

conduct other related work. As part of its educational mission, the EC maintains orientation slides on the WHO-FIC Network for annual meeting participants and has developed educational brochures and information sheets. During its mid-year 2010 teleconference, the Council approved the merger of the Education Committee and Implementation Committee as the Education and Implementation Committee.

4. Mortality Reference Group

The North American Collaborating Center organized and chaired the Mortality Reference Group (MRG) until March 2002, when Dr. Harry Rosenberg retired from the National Center for Health Statistics (NCHS). Donna Hoyert of NCHS now serves as Co-Chair of the MRG, and several other NCHS and Statistics Canada staff participate in the face-to-face meetings and electronic exchanges, along with representatives of other collaborating centres. The MRG organized separate meetings every year since 2002. The 2010 mid-year meeting was held in Cologne, Germany. An additional meeting is being organized prior to the 2010 WHO-FIC Network meeting in Toronto, Canada.

5. Update and Revision Committee

Canadian and U.S. representatives participate in the Update and Revision Committee (ICD-10), reviewing and commenting on documents and participating in face-to-face meetings and teleconferences. The Canadian Institute for Health Information has provided the Co-Chair and Secretariat support to the ICD updating process since 2004. The 2009 updates have yet to be posted to the WHO website. One hundred and one proposals have been received for discussion at the October 2010 meeting in Toronto, Canada. The first round of voting was completed July 7, 2010.

6. Family Development Committee

NCHS and CIHI staff participate in the multiple work products of the Family Development Committee (FDC). NACC has been especially active in issues related to ICECI, terminologies, interventions classification, the Family concept, ICF-CY, activities related to the development of the International Classification of Traditional Medicine, and United Nations classifications. CIHI participated in meetings in Cologne, Germany in March 2010 and Leiden, Netherlands in July 2010 to discuss the International Classification of Health Interventions. The U.S. representative began tenure as Co-Chair of the FDC at the 2008 WHO-FIC Network meeting.

7. Electronic Tools Committee

Canadian and U.S. representatives participate in face-to-face meetings and e-mail discussions of the Electronic Tools Committee. During its mid-year 2010 teleconference, the Council approved the merger of the Electronic Tools Committee and the Terminology Reference Group as the Informatics and Terminology Committee.

8. Morbidity Reference Group

Mea Renahan, Lori Moskal, and Sue Bowman participated in the mid-year meeting of the Morbidity Reference Group held in Cologne, Germany in March 2010. Donna Pickett of the U.S. provided input to the documents prior to the meeting. This meeting focused on revising and adding content to the morbidity coding rules in ICD-10. This work was initiated by a request from the Education Committee for further clarification of the rules, but allowed for discussion of problematic areas such as post-procedural conditions. In addition, Dr. W. Ghali of Canada provided an overview of the International Methodology Consortium for Coded Health Information. Dr. Ustun gave an update on ICD-11.

9. Functioning and Disability Reference Group

John Hough, Jennifer Madans, Geoffrey Reed, Diane Caulfeild and Janice Miller are members of the Functioning and Disability Reference Group (FDRG). Ms. Caulfeild serves on the Secretariat as convener of the Project 1 Task Group, pertaining to ICF Coding Guidelines, and Janice Miller serves on the Secretariat as Chair of the Project 7 Task Group on Environmental Factors. John Hough also serves on the Secretariat as Chair and moderator of the Project 2 Task Group on ICF Updates and is a member of the Project 8 Task Group, related to ICF Terminology. The North American Collaborating Center also nominated Dr. Elizabeth Badley, Dr. Jerome Bickenbach and Dr. Rune Simeonsson, as members of the FDRG.

The FDRG "Project 1" team consists of Geoff Reed, Jennifer Jelsma, John Hough, Lynn Bufka, Hisao Sato, Nenad Kostanjsek and Mary-Ann O'Donovan . This year's activities have focused on adhering to comments put forward by the FDRG members at large during the Annual Meeting in Seoul, and amending the draft document to reflect those consensus opinions, toward finalization. The Project 1 Task Group revamped the guidelines document during the FDRG Midyear Meeting in June, 2010, to present it as an "intermediate level" document for readers requiring more than basic information about ICF coding.

Work by Task Group 7 in 2009-2010 has focused on finalizing the draft paper "Measuring Impact of Environmental Factors on Human Functioning and Disability: A review of various scientific approaches", prepared by Jan Reinhardt, Janice Miller, Gerold Stucki, Catherine Sykes and David Gray. Submission of this paper for publication in Disability and Rehabilitation is

underway. The scope of this paper is on the conceptual aspects of measurement of environmental factors. Discussion is underway to plan a second paper dealing with technical aspects of existing measures of EF (e.g., psychometrics and ICF linking to those measures).

The second focus of work for Task Group 7 has been the ongoing information exchange and collaboration with the ISO 9999 classification for Assistive Products for Persons with Disability. The working group TC 173/SC 2/WG 11 focused on classification and terminology has participated in FDRG mid-year and annual meetings to address options for harmonizing the ISO 9999 with the ICF terminology and categories for Environmental Factors.

The “Project 8” Task Group, with participation by the NCHS representative, met in-person in Nottwil, Switzerland in early December, 2008, for its ICF Ontology Development Workshop. Activities have continued by E-Mail correspondence during 2009 - 2010, working toward aligning the ontological properties manifested by ICF with those discernable in the other WHO Classifications, including the developing ICD-11.

10. Terminology Reference Group

David Berglund, Marcelline Harris, Rita Scichilone, Mea Renahan, Ginette Therriault and Karen Carvell represent the North American Collaborating Center on the Terminology Reference Group (TRG). The TRG held its fourth meeting in Seoul, Korea. During its mid-year 2010 teleconference, the Council approved the merger of the Electronic Tools Committee and the Terminology Reference Group as the Informatics and Terminology Committee.

11. Revision Steering Group

The NACC Head as co-chair of the Council and the co-chair of the Update and Revision Committee (ICD) serve on the Revision Steering Group (RSG) for ICD-10. Both participate in the monthly teleconferences. NCHS and CIHI representatives also participated in the ICD-11 Revision iCamp from September 22 – October 2, 2009 in Geneva; the meeting launched the alpha drafting process for ICD-11. The next iCamp and RSG meeting are being held in Geneva September 27 – October 1, 2010. Dr. Sam Notzon, NCHS, has accepted WHO’s invitation to co-chair the new Mortality TAG. NCHS and CIHI representatives also serve on the new Morbidity TAG and are offering classification expertise to the Quality and Safety TAG. In 2010, Donna Pickett, NCHS, facilitated formation of the Pediatrics TAG, chaired by the American Academy of Pediatrics.

Term of reference d) Major Activities

1. Study and participate in activities related to SNOMED-CT

Both the U.S. and Canada are charter members of the International Health Terminology Standards Development Organization (IHTSDO), and are represented in IHTSDO governance, committees, special interest groups (SIGs), working groups and project groups. NACC representatives serve on the WHO-FIC Network Terminology Reference Group, which works with WHO and the WHO-FIC Network on matters related to the IHTSDO and other terminology issues.

U.S. involvement in IHTSDO is through the National Library of Medicine (NLM), part of the National Institutes of Health. NLM makes SNOMED CT available in multiple formats, in both its native file format, and as part of the Unified Medical Language System (UMLS) Metathesaurus. The U.S. is represented on the IHTSDO General Assembly by Betsy Humphreys of NLM, on the IHTSDO Management Board by Kaiser Permanente, and on the Member Forum by Jan Willis. Canada is represented on the IHTSDO General Assembly by Dennis Giokas of Canada Health Infoway, on the IHTSDO Management Board by Shelagh Maloney of Health Infoway as Vice-Chair, and on the Member Forum by Margaret Kennedy and Zied Kallel.

The U.S. is encouraging adoption of SNOMED CT (along with RxNorm and LOINC) for use in electronic exchange of clinical health information, by recognizing these as part of a set of Interoperability Standards. These standards also include ICD-9-CM and ICD-10-CM. Dr. David Berglund continues to represent NCHS on the IHTSDO Mapping Special Interest Group. A primary area of focus is mapping of SNOMED CT with ICD-10.

U.S., NCHS (in person and by phone), CIHI and Canadian colleagues participated in the IHTSDO meetings in Bethesda, MD, U.S. in October 2009 and Copenhagen, Denmark in April 2010 and MapSIG weekly meetings on mapping SNOMED-CT to ICD-10 and, actively participate in the production of guidelines for the mapping activities, the education curricula and the development of the workbench for automation of the mapping task. These representatives also will participate in the October IHTSDO meetings in Toronto, Canada, which will overlap with the WHO-FIC Network Annual Meeting.

CIHI is working in collaboration with Canada Health Infoway (CHI) on the establishment of terminology and classification standards for the electronic health record. CHI has identified SNOMED-CT along with ICD-10-CA and CCI as accepted standards for the Interoperable electronic Health Record (IeHR). CIHI continues to have representation on advisory committees and all working groups established by Canada Health Infoway, which represents Canada on the IHTSDO. The building of maps between SNOMED-CT and ICD-10-CA and CCI will make use of the map created by the MapSIG group that will map the UMLS SNOMED-CT priority subset to ICD-10.

Term of reference e) Major Activities

1. Establish and conduct protocols for disseminating information about North American activities pertaining to the ICF

The NACC publishes and distributes an electronic ICF Newsletter by conventional E-mail. The ICF Newsletter typically presents a short summary of recent activities related to the ICF, particularly emphasizing ICF research and applications pursued by investigators and policy makers in North America. Marjorie Greenberg, NACC Head, and John Hough from NCHS, contribute editing resources to this Newsletter, and they are assisted by staff member colleagues in the NCHS Office of Information Services who handle the distribution and long-term archiving of the ICF Newsletter.

During this reporting period, NACC has continued to bolster the scientific content of the Newsletter, focusing on recent ICF-oriented publications by North American authors as well as policy-oriented activities that might affect broader implementation of the ICF. We also established a Newsletter segment called “Coder’s Corner,” featuring ICF-coded photographs and a short narrative, toward enhancing readers’ skills as ICF coders.

Anyone can receive the ICF Newsletter by subscribing on this NCHS ICF website: <http://www.cdc.gov/nchs/icd/icf.htm> , then click on “Get email updates” in the upper right corner, following the instructions and confirmation procedures found on the subsequent web page. Previous versions of previous issues of the Newsletter can be viewed on the NACC ICF website at: <http://www.cdc.gov/nchs/icd/icf.htm>

Term of reference f) Major Activities

1. Develop international training courses in ICD-10 mortality coding

NCHS mortality medical coding staff developed two international courses (underlying cause coding and multiple cause coding) oriented to training trainers to code ICD-10 mortality data. The international curriculum on mortality medical coding oriented to automation is an outgrowth of the NCHS International Collaborative Effort (ICE) on Automating Mortality Statistics. The training program covers ICD-10 mortality medical coding oriented to the NCHS automated coding system (SuperMICAR, MICAR, ACME and TRANSAX). The courses are designed for countries that are considering the development of an automated coding system for cause of death information. The courses are similar in content to the domestic training courses that NCHS offers, but are longer (three weeks rather than two), and class size is smaller (no more than 10-12 participants). All course instruction is in English. There is no tuition charge for the course, but participants are responsible for their transportation, housing and per diem expenses.

Future international coding courses have been on hold, due to the departure of senior training staff in recent years. English-speaking international trainees are being included in the standard MMDS training courses offered to US state health personnel.

Term of reference f) Major Activities

2. Contribute to ICF eLearning Tool

The web-based, interactive training tool known as "Code ICF", which was developed earlier this decade by NACC and its contractors with extensive WHO input, is contributing to an eLearning tool on ICF, under development by the German Collaborating Centre and WHO. The Education Committee and Functioning and Disability Reference Group are serving as reviewers for the new tool.

NACC conducted a formal Field Testing episode for the new WHO ICF eLearning Tool, according to the protocol established for the overall Field Testing initiative, immediately following the 2010 NACC ICF Conference.

Term of reference f) Major Activities

3.. Identify Educational Needs and Core Curricula for WHO-FIC

Needs assessment questionnaires for ICD-10 mortality and morbidity coders were finalized by the WHO-FIC Education Committee and circulated to WHO Regional Offices and Collaborating Centers for distribution to the member states in 2004. A paper describing the findings was presented by Sue Walker at the 2004 WHO-FIC Network meeting in Reykjavik and was published in a revised format in *the Journal of the Health Information Management Association of Australia* in 2006. A letter to the Editor by Sue Walker on this subject also was included in the April 2006 issue of the *WHO Bulletin*.

The Education Committee has developed core curricula for ICD-10 mortality and morbidity coders, which were approved by the WHO-FIC Network and International Federation of Health Records Organizations (IFHRO) and were the basis of a call for training materials issued by the Joint WHO-FIC – IFHRO Collaboration in early 2005. The training materials submitted by several countries in response to this call underwent expert review to identify adequacy and gaps. Training materials from Korea, Australia, Sri Lanka and the United States have been recognized by the Joint Collaboration as meeting the standard for Underlying Cause of Death coder training in several knowledge clusters. During 2006, the Education Committee developed a core curriculum and best practices for training certifiers of cause of death. All three core curricula are posted on the Education Committee web site:

http://www.cdc.gov/nchs/icd/nacc_education_committee.htm. They serve as the framework for the ICD-10 Web-based Training Tool developed by WHO with significant participation by the Education Committee.

During 2007, a workgroup of Education Committee and FDRG members, including representatives from NACC, began development of a Core Curriculum for Introductory courses on ICF and the ICF – Children and Youth Version. In 2008, this evolved into Curriculum Modules for ICF Training Programs, which was approved during the 2008 annual WHO-FIC Network meeting as Version 1. The Curriculum Modules also are posted on the Education Committee website and serving as the framework for the ICF eLearning Tool.

Term of reference i) Major Activities

1. Interventions and Procedures

The U.S. Centers for Medicare and Medicaid Services (CMS) continues its refinement of ICD-10-PCS. Changes have been made to ICD-10-PCS (2,193 new codes added, 737 codes revised, 2,823 codes deleted). The net impact of the changes resulted in a decrease in the number of codes in ICD-10-PCS from 72,589 to 71,957. The ICD-10-PCS Index has been redesigned with key features being added for ease of reference and additional cross-referencing. ICD-10-PCS coding guidelines have been posted on the CMS website. At the end of 2009, CMS posted information regarding the ICD-10 conversion project, which details the conversion of the ICD-9-CM-based MS-DRGs into the ICD-10-based DRGs. A summary of the conversion work planned as part of the 2011 update was presented during the March 2010 ICD-9-CM Coordination and Maintenance Committee meeting. Additional updates regarding further changes will be presented at the September 15, 2010 ICD-9-CM Coordination and Maintenance Committee meeting. The draft ICD-10-CM/PCS MS-DRG V26 Definitions Manual is provided on the CMS website and includes both text and HTML versions with condensed and full title formats. The final ICD-10 MS-DRG logic will be subject to rulemaking.

Highlights regarding the 2010 update to ICD-10-PCS may be found on the CMS website: http://www.cms.gov/ICD10/13_2010_ICD10PCS.asp#TopOfPage :

CIHI developed and implemented the Canadian Classification of Health Interventions (CCI) in 2001. It is updated and re-released in concert with the ICD-10-CA, i.e., 2003, 2006, 2009 and the next release is scheduled for 2012. As with ICD-10-CA, all provinces and territories fully implemented CCI for hospital morbidity coding by 2006. Together with the ICD-10-CA, the CCI has been adopted by the Insurance Bureau of Canada for the collection of all diagnostic and intervention data on the Auto Insurance Standard Invoice. CCI also has been adopted by the Ontario Health Informatics Standards Council as the e-Health standard for Ontario. The expertise and experience associated with use of CCI is contributing to international work on interventions classification. The CCI has been made available to the WHO and the Co-Chairs of the FDC for work that is currently transpiring on the development of an international interventions classification. CIHI has been instrumental in creating the preliminary code structure for ICHI and attended the meetings in Cologne, Germany in March 2010 and Leiden, Netherlands in July 2010 for further development of the International Classification of Health Interventions.

Work Plan 2010 – 2014

Appendix: Selected List of ICF-related Articles 2009 -2010

WHO Collaborating Center for the Family of International Classifications For North America

Work Plan 2010 - 2014

The work of the WHO Collaborating Center for the Family of International Classifications for North America is carried out in the United States and Canada. The North American Collaborating Center (NACC) is located at the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention, Hyattsville, MD, U.S.A. All NACC activities in the United States are carried out under the umbrella of NCHS. Within Canada, activities are shared between Statistics Canada and the Canadian Institute for Health Information (CIHI). Both the U.S. and Canada have multiple responsibilities related to the NACC Terms of Reference. The work plan below describes concrete activities related to the Collaborating Center's Terms of Reference. The budget for these activities is the responsibility of the respective organizations

Activity 1:	Title: Promote the development and use of ICD-10 for mortality statistics in the United States, including development of training materials and conduct of courses – Implement ICD-10 for mortality statistics in the U.S.
	Responsible person: Dr. Robert Anderson, Chief, Mortality Statistics Branch, Division of Vital Statistics (DVS), National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC)
	Description: Implementation was a complex project including planning and design; systems and processing conversion and development; modification of guidelines, documentation, and training; deployment in sub national offices; redesign of data files; revised analyses, including comparability or bridge-coding studies; reports; and communication and promotion to external parties. Annual training is carried out with NCHS material which has been reviewed and approved by the WHO-FIC – IFHRO Joint Collaboration and is presented by WHO-FIC – IFHRO recognized trainers.
	Concrete expected outcome: ICD-10 was implemented for mortality effective with deaths occurring in 1999 as collaborative effort with the States. Training is carried out on an annual basis.
	Links with WHO activities: Depended on WHO finalizing ICD-10. Participate in Mortality Reference Group and provide Co-Chair; participate in Update and Revision Committee.
	Source of funding of the activity: NCHS
	Dissemination of the results: To NCHS, State partners, interested parties
	Time frame of the activity: Implementation began with data year 1999; training is ongoing.

Activity 2:	Title: Promote the development and use of ICD-10 for mortality statistics in the United States, including development of training materials and conduct of courses – Production of data tapes and publication of reports
	Responsible person: Dr. Robert Anderson, Chief, Mortality Statistics Branch, Division of Vital Statistics (DVS), NCHS, CDC
	Description: This activity refers to ongoing production of public use data processed according to ICD-10 standards and publication of mortality statistics.
	Concrete expected outcome: Publish preliminary and final mortality data annually, including general mortality, leading causes of death, life tables and infant mortality (most recent data published are for 2007)
	Links with WHO activities: Mortality data are transmitted to WHO for the mortality database.
	Source of funding of the activity: NCHS
	Dissemination of the results: Web and print publications and public use data
	Time frame of the activity: Ongoing

Activity 3:	Title: Promote the development and use of ICD-10 for mortality statistics in Canada – Production of data and publication of reports
	Responsible person: Jeff Latimer, Director, Health Statistics Division, Statistics Canada
	Description: This activity refers to ongoing production of data processed according to ICD-10 standards and publication of mortality statistics.
	Concrete expected outcome: Publish mortality data annually, including general mortality, leading causes of death, life tables and infant mortality (most recent data published are for 2006)
	Links with WHO activities: Mortality data are transmitted to WHO for the mortality database.
	Source of funding of the activity: Statistics Canada
	Dissemination of the results: Electronic publications and public use data
	Time frame of the activity: Ongoing

Activity 4:	Title: Revision of U.S. Standard Certificates of Birth, Death, and Fetal Death
	Responsible person: Dr. Robert Anderson, Chief, Mortality Statistics Branch, Division of Vital Statistics (DVS), NCHS, CDC
	Description: Revision of the U.S. Standard birth and death certificates and the report of fetal death, including specifications, file layout, handbooks and instruction manuals
	Concrete expected outcome: Implementation by all registration areas to promote consistency, comparability and comprehensiveness
	Links with WHO activities: The revised certificates are consistent with WHO standards and ICD-10
	Source of funding of the activity: NCHS and registration areas
	Dissemination of the results: National and State mortality statistics
	Time frame of the activity: 2003 – 2013

Activity 5:	Title: Move towards an electronic death registration system in the United States
	Responsible person: Dr. Robert Anderson, Chief, Mortality Statistics Branch, Division of Vital Statistics (DVS), NCHS, CDC
	Description: Adoption of electronic death registration systems has the potential for greatly speeding up the time from death to publication of mortality statistics, and if the right people participate, to improve data quality.
	Concrete expected outcome: Develop and implement electronic systems in States
	Links with WHO activities: Supports WHO priorities for improving data quality. Work will be coordinated with WHO towards full implementation of the ICD rules and assessment to consider making the electronic tool adoptable as an international standard.
	Source of funding of the activity: Registration areas, CDC, Social Security Administration
	Dissemination of the results: At meetings of International Collaborative Effort (ICE) on Automating Mortality Statistics and WHO-FIC meetings
	Time frame of the activity: 2003-2013

Activity 6:	Title: Promote the use of ICD-10 for mortality classification through technical assistance to other countries
	Responsible person: Dr. Robert Anderson, Chief, Mortality Statistics Branch, Division of Vital Statistics (DVS), NCHS, CDC and Dr. F. Sam Notzon, Director, International Statistics Program, Office of the Center Director, NCHS, CDC.
	Description: In collaboration with WHO HQ and regional offices, as appropriate, visit countries, review current practices, and work with them to make improvements in their vital statistics systems.
	Concrete expected outcome: Adopt international standards in data collection, processing, quality control, and analysis in requesting countries (currently, Eastern Europe, Middle East, Caribbean and South Africa)
	Links with WHO activities: Supports WHO priorities for implementing mortality data systems in Information Paradox countries and other countries requiring assistance. Activities are coordinated with WHO.
	Source of funding of the activity: NCHS, CDC
	Dissemination of the results: In selected countries and in reports to WHO-FIC Network
	Time frame of the activity: Ongoing

Activity 7:	Title: NCHS leadership of International Collaborative Effort on Automating Mortality Statistics
	Responsible person: Dr. F. Sam Notzon, Director, International Statistics Program, Office of the Center Director, NCHS, CDC, and Dr. Robert Anderson, Chief, Mortality Statistics Branch, Division of Vital Statistics (DVS), NCHS, CDC
	Description: In a continuing effort to standardize mortality processing and improve international comparability and share resources, the international collaborative effort discusses issues related to implementation and use of automated mortality systems and contributes to projects to foster comparability.

	Concrete expected outcome: Hold regular planning meetings; coordinate assistance and training to countries interested in implementing automated systems; conduct Automation Seminars, as resources permit. Fourth plenary held in Silver Spring, Maryland in May of 2008. Planning Committee last met in March 2010..
	Links with WHO activities: Supports WHO priorities for implementing mortality data systems in Information Paradox countries and other countries requiring assistance, and for improving data quality and comparability.
	Source of funding of the activity: NCHS
	Dissemination of the results: ICE members and other interested parties
	Time frame of the activity: Ongoing
Activity 8:	Title: Statistics Canada participation in International Collaborative Effort on Automating Mortality Statistics
	Responsible person: Jeff Latimer, Director, Health Statistics Division, Statistics Canada
	Description: In a continuing effort to standardize mortality processing and improve international comparability and share resources, the international collaborative effort discusses issues related to implementation and use of automated mortality systems and contributes to projects to foster comparability.
	Concrete expected outcome: Attend regular planning meetings and plenary meetings; contribute to assistance and training of countries interested in implementing automated systems.
	Links with WHO activities: Supports WHO priorities for implementing mortality data systems in Information Paradox countries and other countries requiring assistance, and for improving data quality and comparability.
	Source of funding of the activity: Statistics Canada
	Dissemination of the results: As reported at the WHO-FIC Annual meeting
	Time frame of the activity: Ongoing.
Activity 9:	Title: Develop international training courses in ICD-10 mortality coding
	Responsible person: Tyringa Crawford, Division of Vital Statistics, National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC)
	Description: NCHS mortality medical coding staff have developed two international courses (underlying cause coding and multiple cause coding) oriented to training trainers to code ICD-10 mortality data. The international curriculum on mortality medical coding oriented to automation is an outgrowth of the NCHS International Collaborative Effort (ICE) on Automating Mortality Statistics.
	Concrete expected outcome: Standardize mortality processing, improve international comparability of mortality data and share resources.
	Links with WHO activities: Supports WHO priorities for implementing mortality data systems in Information Paradox countries and other countries requiring assistance, and for improving data quality and comparability.
	Source of funding of the activity: NCHS. Trainees are responsible for transportation, housing and per diem, but there is no tuition.
	Dissemination of the results: Information on courses is included in annual NACC reports.
	Time frame of the activity: International courses currently are on hold and will be reinstated once retired training staff have been replaced and new staff have acquired sufficient training experience

Activity 10:	Title: Develop comparability ratios for ICD-10 mortality statistics in the United States	
	Responsible person: Dr. Robert Anderson, Chief, Mortality Statistics Branch, Division of Vital Statistics (DVS), NCHS, CDC	
	Description: Investigate effect of implementing a new revision of ICD on mortality statistics to account for disjuncture in trends and explain what portion of changes are statistical artifacts versus legitimate trends, produce report and data file on comparability, and provide guidelines on the use and interpretation of comparability results.	
	Concrete expected outcome: Release final comparability data file Provide technical support for the analysis of trends	
	Links with WHO activities: All member states are expected to prepare comparability ratios with introduction of a new version of ICD.	
	Source of funding of the activity: NCHS, CDC, National Institutes of Health	
	Dissemination of the results: Web and print publications and public use data	
	Time frame of the activity: Final comparability file was released in 2004; ongoing support as needed	
Time frame of the activity: Ongoing and as required by State and federal mortality classification staff		
Activity 11:	Title: Develop comparability ratios for ICD-10 mortality statistics in Canada	
	Responsible person: Jeff Latimer, Director, Health Statistics Division, Statistics Canada	
	Description: A study designed to assess the impact of the implementation of ICD-10 on Canadian mortality trends by producing ICD-9/ICD-10 comparability ratios	
	Concrete expected outcome: Publication of comparability ratios for selected causes of death for 1999 mortality data and provide technical support for the analysis of trends	
	Links with WHO activities: All member states are expected to prepare comparability ratios with introduction of a new version of ICD.	
	Source of funding of the activity: Health Statistics Division, Statistics Canada	
	Dissemination of the results: The Comparability of ICD-10 and ICD-9 for Mortality Statistics in Canada report, published in 2005	
	Time frame of the activity: Final comparability ratios published in 2005 and ongoing support	
Activity 12:	Title: Promote the use of ICD-9-CM for morbidity applications in the United States	
	Responsible person: Donnamaria Pickett, Medical Systems Administrator, Classifications and Public Health Data Standards Staff (CPHDSS), National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC)	
	Description: NCHS developed a clinical modification of ICD-9 and is responsible for the maintenance and update of ICD-9-CM. This includes holding two meetings per year of the ICD-9-CM Coordination and Maintenance Committee and releasing an annual CD-ROM in October of every year with the annual update. Coding guidelines are developed annually in collaboration with the Centers for Medicare and Medicaid Services (CMS), American Hospital Association and American Health Information Management Association.	

	Concrete expected outcome: Use of ICD-9-CM for all official morbidity statistics and for administrative purposes as mandated by the Health Insurance Portability and Accountability Act of 1996 (HIPAA) until 1 October 2013.
	Links with WHO activities: NCHS developed and maintains a clinical modification of ICD-9, with permission from WHO.
	Source of funding of the activity: NCHS
	Dissemination of the results: The classification is available in hard copy and on CD-ROM from a number of sources in the United States. A database version is under development. Health care data using ICD-9-CM are published by NCHS, CMS and other organizations. Modifications have been taken up by other collaborating centers and incorporated into ICD-10.
	Time frame of the activity: Ongoing until 2013
Activity 13:	<p>Title: Develop, implement and promote the use of ICD-10-CM for morbidity applications in the United States</p> <p>Responsible person:: Donnamaria Pickett, Medical Systems Administrator, Classifications and Public Health Data Standards Staff (CPHDSS), NCHS, CDC</p> <p>Description: NCHS has developed a clinical modification of ICD-10 for morbidity applications in the United States. ICD-10-CM is updated annually to be consistent with ICD-10 and ICD-9-CM. Updates also have been made based on a 2003 pilot test. General equivalence mappings (crosswalks) with ICD-9-CM have been finalized and are posted with the classification. http://www.cdc.gov/nchs/about/otheract/icd9/icd10cm.htm</p> <p>Concrete expected outcome: ICD-10-CM will replace ICD-9-CM, Volumes 1 and 2.</p> <p>Links with WHO activities: NCHS developed a clinical modification of ICD-10, with permission from WHO. Participate in Morbidity Reference Group, Update and Revision Committee, Family Development Committee, and Terminology Reference Group. The NACC Head is a member of the ICD Revision Steering Group.</p> <p>Source of funding of the activity: NCHS</p> <p>Dissemination of the results: The 2010 version of ICD-10-CM has been posted on the NCHS classifications website: http://www.cdc.gov/nchs/icd/icd10cm.htm The classification will be available in books, on CD-ROM and in database version.</p> <p>Time frame of the activity: The date for the implementation of ICD-10-CM has been established as October 1, 2013. The final rule designating the transition to ICD-10-CM was published on January 17, 2009.</p>
Activity 14:	<p>Title: Develop, implement and promote the use of ICD-10-CA for morbidity applications in Canada, including development and conduct of education programs</p> <p>Responsible person: Mea Renahan, Manager, Classifications; Lori Moskal, Ginette Therriault, Karen Carvell and Joy Fletcher, Program Leads Classifications, Canadian Institute for Health Information</p> <p>Description: ICD-10-CA and CIM-10-CA have been implemented in all provinces and territories as of April 1, 2006.for data collection by all acute care hospital facilities. It is also the standard for clinical data collection in the National Ambulatory Care Reporting System. In a more limited capacity it has been incorporated into data bases used in rehabilitation, mental health, home and continuing care and for standardized auto insurance claims, and most recently in Emergency care coding and Primary Care..</p>

	Concrete expected outcome: ICD-10-CA (E&F) is updated in accordance with URC documents and cycles. There are also updates added as required for use in Canada.
	Links with WHO activities: CIHI provides the Co-Chair and secretariat for the Update and Revision committee (ICD), and is an active participant in the WHO Morbidity Reference Group, Family Development Committee, Electronic Tools Committee and Terminology Reference Group. The Co-Chair of the URC (ICD) is a member of the ICD Revision Steering Group.
	Source of funding of the activity: CIHI
	Dissemination of the results: ICD-10-CA is used only in Canada. It has been fully implemented in all acute care hospital facilities, is the basis for the National Ambulatory Care Reporting System and is slowly being adopted throughout the whole health care system e.g. home and continuing care, rehabilitation, auto insurance claims, primary care, emergency services. It is the basis for Canada's Case Mix Grouping Methodologies for in-patients, ambulatory care and day procedures.
	Time frame of the activity: Current update cycle is every three years. The most recent full update of the ICD-10-CA/CIM-10-CA was released for implementation on April 1, 2009. All ICD-10-CA/CIM-10-CA related or derived products are updated in line with each version release e.g. health indicators reports. Work on version 2012 commenced in 2009.

Activity 15:	Title: To develop and update Canadian Coding Standards for ICD-10-CA and CCI for the collection of hospital morbidity data, both in-patient and ambulatory care in Canada
	Responsible person: Joy Fletcher, Canadian Institute for Health Information
	Description: With input from the National Coding Advisory Committee, data mining of databases and the queries in the National E-Query Coding Service, reports from re-abstraction studies and input from all secondary data users within CIHI, coding standards are provided which clarify the notes and rules in Volume 1, 2 and 3 of ICD-10.giving clear directives and case examples for applying the coding rules for morbidity data collection.
	Concrete expected outcome: Improved data quality and valid, comparable data
	Links with WHO activities: Ensures compliance with WHO rules
	Source of funding of the activity: CIHI
	Dissemination of the results: Data mining and re-abstraction studies allow evaluation of the up-take of the standards and provide end-users with an assessment on the data's fit for use e.g. in hospital reports, health indicators, national , provincial, regional studies, grouping methodologies.
	Time frame of the activity: Triennial releases of updated and new standards with an impact analysis for secondary data users.

Activity 16:	Title: To develop educational offerings to reinforce coding standards and data quality throughout Canada.
	Responsible person: Joy Fletcher, Canadian Institute for Health Information
	Description: Data mining, re-abstraction studies and the National e-Query Coding Service help identify areas within coding that require extra attention.
	Concrete expected outcome: Three to four new educational modules reinforcing coding standards and e-Learning Case Studies are developed annually. Assist the CHIMA and provincial organizations in developing education/training modules to facilitate consistency in data collection and enhance data quality.

	Links with WHO activities: Enhances data quality of submissions on the international forum e.g. OECD annual submissions
	Source of funding of the activity: CIHI
	Dissemination of the results: Offerings are available to all who use the ICD-10-CA.
	Time frame of the activity: Annual release of new materials and updating of existing materials.

Activity 17:	Title: To facilitate consistent application of ICD-10-CA morbidity coding standards throughout Canada.
	Responsible person: Lori Moskal, Program Lead, Classifications, Canadian Institute for Health Information
	Description: The e-Query Coding Service is available to all coders of morbidity data throughout Canada. Classification Specialists within CIHI assist coders in coding challenging cases according to the Canadian Coding Standards and WHO ICD-10 coding rules. Over 14,000 queries are maintained in a searchable database
	Concrete expected outcome: Enhance the consistency in the application of coding standards and rules thus ensuring the data is fit for use. Identifies gaps or ambiguous areas within the ICD.
	Links with WHO activities: Supports ICD-10 coding rules and also identifies areas requiring updating or clarity in the ICD-10
	Source of funding of the activity: CIHI
	Dissemination of the results: Feeds into the URC annual updates and recommendations for revision of the ICD-10 and ICD-10-CA/CIM-10-CA, development of Canadian Coding Standards and educational offerings.
	Time frame of the activity: Ongoing

Activity 18:	Title: Promote the development and use of the ICF in the United States
	Responsible person: Dr. John Hough, Statistician, Classifications and Public Health Data Standards Staff (CPHDSS), National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC)
	Description: ((1) Conduct NACC Conferences on the ICF, in conjunction with our Canadian partners and within fiscal constraints; (2) Continue publication of the "NACC ICF Newsletter"; (3) Contribute to activities associated with including the ICF within the U.S National Library of Medicine's Unified Medical Language System (UMLS); (4) Contribute ICF-oriented content and expertise to the federal Interagency Subcommittee on Disability Statistics (ISDS); (5) Sponsor or support other ICF meetings and conferences, (6) As resources permit, consider approaches for validating and expanding work with WHO on developing crosswalks of ICF with major assessment tools; (7) Support ICF-related recommendations in the Institute of Medicine (IOM) 2007 report on <u>The Future of Disability in America</u> , working to ensure consistency with international ICF updating and implementation.

	Concrete expected outcomes: 1) ICF Web-Seminar Series held in December, 2009 and June, 2010; an in-person NACC ICF Conference was conducted in June, 2010. (2) Periodic publication of NACC ICF Newsletter. (3) Broaden the adoption of ICF as a national standard and specific applications of ICF in the ways recommended by the CHI Disability Working Group and the NCVHS. (4) NACC individual and institutional representatives have regular presentation and reporting roles within ISDS and ICDR activities. (5) Participate in PROMIS workshops as feasible and appropriate; (6) Conduct at least one Field Testing episode of the WHO ICF eLearning Tool; (7) Review IOM report recommendations with U.S. and Canadian colleagues and provide information about possible North American proposals for updates to ICF among interested parties or enquirers.
	Links with WHO activities: NACC representatives bolster and assist WHO educational and training efforts for ICF and ICF adoption through the activities and instruments mentioned above as outcomes.
	Source of funding of the activity: NCHS, CIHI, Statistics Canada, and other private, academic, non-profit, and governmental organizations, all within fiscal constraints.
	Dissemination of the results: NACC Newsletter, conferences and ICF training activities.
	Time frame of the activity: Ongoing

Activity 19:	Title: Establish and conduct protocols for disseminating information about North American activities pertaining to the ICF
	Responsible person: Dr. John Hough, Statistician, Classifications and Public Health Data Standards Staff (CPHDSS), NCHS, CDC
	Description: Serve as an “information broker” about applications of the ICF in North America. Support and report on the publication of articles on ICF by North American authors.
	Concrete expected outcome: Periodic ICF newsletters, including literature supplements. Web-based Annotated Bibliography of ICF publications in scientific journals, keyed according to search terms in the “RehabData” Thesaurus maintained by the U.S. National Rehabilitation Information Center. (planned).
	Links with WHO activities: The Annotated Bibliography would link to WHO Internet resources about the ICF, including links to publication sets and similar bibliographies prepared by our partner WHO-FIC Collaborating Centers.
	Source of funding of the activity: NCHS.
	Dissemination of the results: The Annotated Bibliography product would be designed to be a keyword searchable database on the World Wide Web.
	Time frame of the activity: Newsletter, ongoing; Bibliography, 2009 - 2011

Activity 20:	Title: Conduct training and information sessions on understanding and applying the ICF
	Responsible person: Dr. John Hough, Statistician, Classifications and Public Health Data Standards Staff (CPHDSS), NCHS, CDC and Diane Caulfeild, Program Lead, Classifications, Canadian Institute for Health Information
	Description: Ensure that each NACC Conference on the ICF conducted during the period of this Work Plan maintains a primary focus on education and information sharing about the ICF, particularly in introducing innovative ways of presenting such didactic material. During the 2010 NACC ICF Conference, a one-hour tutorial emphasizing ICF coding, followed by an introduction to the ICF eLearning Tool, transpired.

	Concrete expected outcome: Focus on ICF training activities, including the 2010 NACC ICF Conference, conducted June 23-24, 2010 in Bethesda, MD, USA. Also conduct the semi-annual “ICF Web Seminar Series.”
	Links with WHO activities: NACC continues to be involved directly with WHO team members on web-based ICF training, in conjunction with the Functioning and Disability Reference Group and the Education Committee. The semi-annual ICF Web Seminar Series is available for retrospective viewing on a password-protected Internet site for one year after each iteration.
	Source of funding of the activity: NCHS, CIHI, Statistics Canada, and others, within fiscal constraints.
	Dissemination of the results: These products are designed for both broad and narrow dissemination, as described. A consistent theme among each of these products would be their accessibility through various Internet training settings and formats. The ICF Web Seminar Series is available free of charge to anyone in the US and Canada in real-time with an Internet website and live telephone conference calling connection; other people around the world can access the Internet presentation in real-time without the telephone connection.
	Time frame of the activity: Ongoing activities according to demand and available resources.

Activity 21:	Promote the development and use of the ICF in Canada
	Responsible person: Diane Caulfeild, Program Lead, Classifications, Canadian Institute for Health Information
	Description: Co-host NACC Conferences on the ICF in collaboration with our NACC partners – Statistics Canada and NCHS.. Liaise with government agencies, researchers and clinicians to facilitate understanding and adoption of the ICF. Promote use of ICF at population and clinical level according to WHO-FIC priorities. Providing support to CIHI stakeholders and WHO on the development of crosswalks for ICF with InterRAI;
	Concrete expected outcome: Support HRSDC in their application of ICF in all Federal government policies that ensure the needs of persons with disabilities are addressed. Contribute ICF-oriented content and expertise to the Canadian Federal Government, Office for Disability Issues. Continue to support and promote the use of ICF in Canada.. Establish a Canadian ICF Users’ Interest Group in 2010-11 to promote the use of ICF across Canada in all fields, determine the level of implementation of ICF in Canada and encourage collaboration among existing and potential users.
	Links with WHO activities: Promote the dissemination and utilization of ICF with the InterRAI because the InterRAI assessments are broadly used globally. Active member of all ICF related WHO-FIC committees and reference groups. Chair Working Group 1 for the development of Guidelines and Principles of Use and Chair Working Group 7 on Environmental Factors for the Functioning and Disability Reference Group (FDRG).
	Source of funding of the activity: CIHI
	Dissemination of the results: through WHO-FIC, NACC and other related meetings and conferences
	Time frame of the activity: ongoing

Activity 22:	Title: NCHS leadership of International Collaborative Effort (ICE) on Injury Statistics
	Responsible person: Lois Fingerhut, Consultant, National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC)
	Description: A forum for international exchange and collaboration among injury researchers who develop and promote international standards in injury data collection and analysis. U.S. and Canadian experts participate along with many other countries.
	Concrete expected outcome: Internationally comparable injury statistics useful for injury prevention and control
	Links with WHO activities: WHO injury experts participate in the ICE. In 2004, the ICE recommended an External Cause of Injury Mortality Matrix to be formally accepted by WHO as a special tabulation list for injury mortality data. Review of ICD-10 Chapter XIX for revision in ICD-11 and participation on Topical Advisory Group.
	Source of funding of the activity: NCHS
	Dissemination of the results: Publications and NCHS web site: http://www.cdc.gov/nchs/injury.htm
	Time frame of the activity: Ongoing

Activity 23:	Title: Support the work of the various committees and reference groups established to assist WHO in the development, testing, implementation, use, improvement, updating and revision of members of the WHO-FIC
	Responsible person: Marjorie Greenberg, Chief, , Classifications and Public Health Data Standards Staff (CPHDSS), National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC) and NACC Head; Mea Renahan, Manager, Classifications, Canadian Institute for Health Information and Jeff Latimer, Director, Health Statistics Division, Statistics Canada
	Description: NACC representatives serve on all WHO-FIC Committees and Reference Groups and lead a number of efforts. The NACC Head is serving a two-year term as Co-Chair of the WHO-FIC Council and co-chairs the Education Committee; CIHI serves as Co-Chair and Secretariat for the Update and Revision Committee (ICD); NCHS representatives Co-Chair the Mortality Reference Group and Family Development Committee, and three CIHI representatives serve on the Secretariat for the Functioning and Disability Reference Group.
	Concrete expected outcome: Through active participation in and leadership of WHO-FIC Network committees and reference groups, NACC supports the mission of improving health through the ongoing development, maintenance and promotion of an integrated suite of health classifications and related products that produce information of value and utility across the world.
	Links with WHO activities: The WHO-FIC Network Strategy and Work Plan is directly linked to the WHO strategic priorities and work plan.
	Source of funding of the activity: NCHS, Statistics Canada, CIHI and partner organizations that support participation by their staff and associates.
	Dissemination of the results: Information is disseminated through annual reports, websites and presentations at annual meetings and conferences.
	Time frame of the activity: Ongoing

Activity 24:	Title: Participate on IHTSDO Mapping Special Interest Group (SIG).
--------------	---

	Responsible person: David Berglund, M.D., Medical Officer, Classifications and Public Health Data Standards Staff (CPHDSS), National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC)
	Description: Dr. Berglund served as Department of Health and Human Services representative to the SNOMED Editorial Board from 1999 – 2007. He now participates on the IHTSDO Mapping Special Interest Group. Other U.S. and CIHI representatives also serve on this and related IHTSDO Special Interest Groups.
	Concrete expected outcome: Contribute to methodology for mappings to WHO-FIC classifications. Participated in International Health Terminology Standards Development Organization (IHTSDO) conferences and teleconferences in 2009-2010.
	Links with WHO activities: Activities related to SNOMED CT and mappings are part of the terms of reference for the Terminology Reference Group and a priority area for WHO.
	Source of funding of the activity: NCHS
	Dissemination of the results: Updates of SNOMED CT and related products are now the responsibility of IHTSDO, with U.S. distribution through the NLM
	Time frame of the activity: Dr. Berglund continues as a member of the Mapping SIG and TRG.

Activity 25:	Title: Promote development of CAP and NCHS-approved crosswalk between SNOMED and ICD-9-CM and ICD-10-CM
	Responsible person: Donnamaria Pickett, Medical Systems Administrator, Classifications and Public Health Data Standards Staff (CPHDSS), NCHS, CDC
	Description: NCHS is working with the National Library of Medicine (NLM), American Health Information Management Association and College of American Pathologists on mappings between SNOMED-CT and ICD-9-CM and ICD-10-CM
	Concrete expected outcome: : A validated map or maps between SNOMED-CT and ICD-9-CM and ICD-10-CM
	Links with WHO activities: The work relates directly to the work of the WHO-FIC Terminology Reference Group (TRG)
	Source of funding of the activity: NCHS and NLM
	Dissemination of the results: Will be made available in the Unified Medical Language System on NLM website
	Time frame of the activity: Ongoing. Timeframe will be influenced by new mapping activities of the International Health Terminology Standards Development Organization and current efforts to identify a heavily-used subset of codes and terms for mapping.

Activity 26:	Title: Active investment and involvement in the mapping activity to map the 9200 SNOMED-CT priority concepts to ICD-10
	Responsible person: Ginette Therriault, Program lead - Classification, Canadian Institute for Health Information
	Description: Provide input of materials in the fabrication phase and active participation in updates of the materials as required by participants of the MapSIG group. Define the mapping process to be incorporated in the IHTSDO Workbench and all the material to define the project and activities associated with the mapping. Newer activities involve SIGs for education, primary care and implementation.
	Concrete expected outcome: Tested workbench for mapping

	Links with WHO activities: should facilitate the work of the Harmonization Panel
	Source of funding of the activity: CIHI
	Dissemination of the results: IHTSDO website
	Timeframe of the activity: 2008 and ongoing.

Activity 27:	Title: Identify educational needs and core curricula for WHO-FIC
	Responsible person: Marjorie Greenberg, Chief, Classifications and Public Health Data Standards Staff (CPHDSS), NCHS, CDC, NACC Head and Chair of WHO-FIC Education Committee
	Description: The WHO-FIC Education Committee conducts structured needs assessments and uses other approaches (e.g., gathering information through conferences and consultations) for identifying educational needs of users of the classifications. Core curricula for ICD-10 underlying cause-of-death coders, morbidity coders and certifiers of cause of death have been developed to help guide development of training materials in a decentralized global environment and to serve as benchmarks for reviewing existing training materials. A document on Curriculum Modules for ICF Training Programs has been developed through a joint effort of the Education Committee and the Functioning and Disability Reference Group.
	Concrete expected outcome: Findings from needs assessments have guided the development of the International Training and Certification Program for ICD-10 Mortality and Morbidity Coders and Trainers. The availability of internationally developed and approved core curricula can guide development of educational materials, identify gaps in available materials and improve the comparability of training received throughout the world. This should result in improvements in the quality of data collected.
	Links with WHO activities: The ICD-10 activities are carried out by the Education Committee and the Joint Collaboration (JC) with the International Federation of Health Records Organizations (IFHRO) on behalf of the WHO-FIC Network. IFHRO is a non-governmental organization in official relations with WHO. The ICF-related activities are a joint project of the Education Committee (EC) and the Functioning and Disability Reference Group (FDRG).
	Source of funding of the activity: NCHS supports the mid-year meetings and teleconferences of the Education Committee (EC) and Joint Collaboration (JC). WHO-FIC Collaborating Centres, member countries and IFHRO or its affiliates support participation by their respective representatives in activities of the EC, JC and FDRG.
	Dissemination of the results: All materials developed by the EC and JC are posted on the EC website, which resides on the NACC and NCHS website: http://www.cdc.gov/nchs/icd/nacc_education_committee.htm A paper describing the findings from the needs assessments for ICD-10 coders was published in the <i>Journal of the Health Information Management Association of Australia</i> in 2006. Mid-year meeting of EC and JC held in February 2010 in Cologne, Germany..
	Time frame of the activity: Ongoing

Activity 28:	Title: Active support and input to the international electronic training projects
	Responsible person: NCHS and WHO-FIC Education Committee
	Description: Provide input of materials and review in the construction phase and active participation in updates of the materials as required by updates of ICD and ICF. Promote the use of the materials in projects and activities inside and outside the U.S. and Canada and assist in French translation.
	Concrete expected outcome Up-to-date electronic self learning tools for ICD and ICF.

	Links with WHO activities: This is a WHO-led project.
	Source of funding of the activity: NCHS, WHO, other WHO-FIC collaborating centres
	Dissemination of the results: WHO website
	Time frame of the activity: Starting from 2008, ongoing

Activity 29:	Title: To provide support to existing and potential users of the WHO-FIC and of the data thus derived in North America and other English-speaking countries
	Responsible person: NCHS, CIHI, Statistics Canada
	Description: This activity aims to aid users in the interpretation and use of the Family of International Classifications for measuring various components of health
	Concrete expected outcome: Answering questions in regards to the classifications and their applications, to lead to an increased understanding by clients when applying and/or interpreting a classification, and possibly a wider use of the classifications.
	Links with WHO activities: Client questions for clarification or requests for new categories may be considered via the WHO-FIC update process, including the Update and Revision Committee, Mortality Reference Group, Morbidity Reference Group and Functioning and Disability Reference Group.
	Source of funding of the activity: NCHS, CIHI, Statistics Canada
	Dissemination of the results: Various methods, including the use of the Mortality Reference Group and Morbidity Reference Group electronic discussions
	Time frame of the activity: Ongoing

Activity 30:	Title: Conduct work on at least one related and/or derived member of the WHO-FIC
	Responsible person: NCHS, CIHI, Statistics Canada
	Description: The WHO Family of International Classifications includes derived and related classifications that extend or complement the reference classifications. NACC representatives co-led development of the ICF – Children and Youth (CY) Version and actively participate in the development of an International Classification of Health Interventions (ICHI). NCHS facilitated a meeting between WHO and the National Center for Complementary and Alternative Medicine (NCCAM) in March 2010 regarding development of the International Classification of Traditional Medicine (ICTM).
	Concrete expected outcome: Promote the appropriate selection of classifications in the range of settings in the health field across the world. Explore uses of ICF-CY at clinical and population level. Contribute expertise and experience to international work on interventions classification; participate in activities related to primary care classification, in general, and “reason for visit” classification specifically; and provide nosological support to the International Classification of External Causes of Injury. NCCAM will support participation in international meetings to develop the ICTM.
	Links with WHO activities: The WHO constitution mandates the production of international classifications on health so that there is a consensual, meaningful and useful framework which governments, providers and consumers can use as a common language.
	Source of funding of the activity: NCHS, CIHI, Statistics Canada

	<p>Dissemination of the results: ICF-CY was officially introduced at a Conference on Childhood Disability in Venice, Italy in October 2007. NACC Head convened a stakeholders panel at a conference on primary care classification in Washington, D.C. in October 2007. NCHS staff are meeting to explore the relationship between the data element, "Reason for Visit", used in ambulatory care surveys and the International Classification of Primary Care and how to migrate that data element into national and international standards CIHI staff are involved in the integration of ICD-10-CA and the ICPC-2 into EMRs for Primary Care. CIHI has developed a Dx Short List (837 ICD Codes) for use in Emergency Departments throughout Canada. Other activities are disseminated in annual reports, papers at conferences and meetings and on websites.</p>
	<p>Time frame of the activity: Ongoing</p>

<p>Activity 31:</p>	<p>Title: Participation in the revision of ICD</p> <p>Responsible person: NCHS, CIHI, Statistics Canada</p> <p>Description: 1) Participate on Revision Steering Group and in Topical Advisory Groups (TAGs), 2) Provide electronic files of clinical modifications to ICD-10 to ICD-11 Revision platform for international comparability 3) Channel suggestions of national scientific societies to the revision work and organize meetings with stakeholders 4) Support the alpha and beta testing phases, according to the protocols, including a) solicitation and coordination of comments, assessment of translation issues for the alpha phase and development of samples of translation and back-reporting for alpha phase, and b) conduct of field tests for the beta phase.</p> <p>Concrete expected outcome ICD-11</p> <p>Links with WHO activities: WHO Revision process. NACC Head convened a high-level meeting of key federal US representatives in health IT, classification and terminology and World Health Organization (WHO) staff and consultants in March 2008, for briefing and discussion on revision of the International Classification of Diseases (ICD). NACC Head and URC co-chair (ICD) participate in meetings and teleconferences of Revision Steering Group. NACC representatives serve on TAG's, co-chair the Mortality TAG (NCHS) and support the formation and work of other TAGs.</p> <p>Source of funding of the activity: NCHS, CIHI, Statistics Canada, as feasible</p> <p>Dissemination of the results: Depending on time frame of ICD revision process and in collaboration with WHO</p> <p>Time frame of the activity: Throughout revision process</p>
---------------------	---

Appendix

List of Selected ICF Articles Published by North American Authors in 2009-2010

From institutions in Canada:

Berg K, Finne-Soveri H, Gray L, *et al.* Relationship between interRAI HC and the ICF: Opportunity for operationalizing the ICF. *BMC Health Services Research* 2009, 9:47 (11 pages).

[PubMed Abstract: \(PubMed ID: 19292897\)](#)

[Through the courtesy of the publisher, a free copy is available without subscription on the World Wide Web.](#)

Finch LE, Higgins J, Wood-Dauphinee SL, Mayo NE. A measure of physical functioning to define stroke recovery at 3 months: Preliminary results. *Archives of Physical Medicine and Rehabilitation* 2009 (September); 90(9):1584-1595.

[PubMed Abstract: \(PubMed ID: 19735788\)](#)

Hebert JS, Wolfe DL, Miller WC, *et al.* Outcome measures in amputation rehabilitation: ICF body functions. *Disability and Rehabilitation* 2009, 31(19):1541-1554.

[PubMed Abstract: \(PubMed ID: 19479495\)](#)

Huber JG, Sillick J, Skarakis-Doyle E. Personal perception and personal factors: Incorporating health-related quality of life into the International Classification of Functioning, Disability and Health. *Disability and Rehabilitation* 2009, Advance access published on May 4, 2010. 11 pages. DOI:10.3109/09638281003797414.. Accessed July 23, 2010.

[PubMed Abstract: \(PubMed ID: 20441436\)](#)

King G, McDougall J, DeWit D, *et al.* Predictors of change over time in the activity participation of children and youth with physical disabilities. *Children's Health Care* 2009; 38:321-351.

[PubMed Abstract: \(PubMed ID: 19907673\)](#)

[Through the courtesy of the publisher, a free copy is available without subscription on the World Wide Web.](#)

Levasseur M, Desrosiers J, Whiteneck G. Accomplishment level and satisfaction with social participation of older adults: Association with quality of life and best correlates. *Quality of Life Research* 2010 (June); 19(5):666-675.

[PubMed Abstract: \(PubMed ID: 20237957\)](#)

McDougall J, Evans J, Baldwin P. The importance of self-determination to perceived quality of life for youth and young adults with chronic conditions and disabilities. *Remedial and Special Education* 2010 (July/August); 31(4):252-260.

[Publisher's Abstract](#)

McDougall J, Wright V, Rosenbaum P. The ICF model of functioning and disability: Incorporating quality of life and human development. *Developmental Neurorehabilitation* 2010 (June); 13(3):204-211.

[PubMed Abstract: \(PubMed ID: 20450470\)](#)

Noonan VK, Kopec JA, Noreau L, *et al.* A review of participation instruments based on the International Classification of Functioning, Disability and Health. *Disability and Rehabilitation* 2009; 31(23):1883-1901.

[PubMed Abstract: \(PubMed ID: 19479505\)](#)

Noonan VK, Kopec JA, Noreau L, *et al.* Comparing the content of participation instruments using the International Classification of Functioning, Disability and Health. *Health and Quality of Life Outcomes* 2009 (November 13); 7:93 (12 pages).

[PubMed Abstract: \(PubMed ID: 19909555\)](#)

[Through the courtesy of the publisher, a free copy is available without subscription on the World Wide Web.](#)

Proding B, Weise AP, Shaw L, Stamm TA. A Delphi study on environmental factors that impact work and social life participation of individuals with multiple sclerosis in Austria and Switzerland. *Disability and Rehabilitation* 2010; 32(3):183-195.

[PubMed Abstract: \(PubMed ID: 20001824\)](#)

Ravenek JM, Schneider MA. Social support for physical activity and perceptions of control in early Parkinson's disease. *Disability and Rehabilitation* 2009; 31(23):1925-1936.

[PubMed Abstract: \(PubMed ID: 19479519\)](#)

Rousseau-Harrison K, Rochette A, Routhier F, *et al.* Impact of wheelchair acquisition on social participation. *Disability and Rehabilitation: Assistive Technology* 2009 (September); 4(3):344-352.

[PubMed Abstract: \(PubMed ID: 19565375\)](#)

Thomas-Stonell N, Oddson B, Robertson B, Rosenbaum PL. Development of the FOCUS (Focus on the Outcomes of Communication Under Six), a communication outcome measure for preschool children. *Developmental Medicine and Child Neurology* 2010; 52:47-53.

[PubMed Abstract: \(PubMed ID: 19709136\)](#)

Walton DM. A review of the definitions of 'recovery' used in prognostic studies on whiplash using an ICF framework. *Disability and Rehabilitation* 2009; 31(12):943-957.

[PubMed Abstract:](#) [\(PubMed ID: 19116806\)](#)

Walton DM, Macdermid JC, Nielson W. Recovery from acute injury: Clinical, methodological and philosophical considerations. *Disability and Rehabilitation* 2010; 32(10):864-874.

[PubMed Abstract:](#) [\(PubMed ID: 19852703\)](#)

From institutions in the United States:

Alexander MS, Anderson KD, Biering-Sorensen F, *et al.* Outcome measures in spinal cord injury: Recent assessments and recommendations for future directions. *Spinal Cord* 2009 (August); 47(8):582-591.

[PubMed Abstract:](#) [\(PubMed ID: 19381157\)](#)

Beninato M, Portney LG, Sullivan PE. Using the International Classification of Functioning, Disability and Health as a framework to examine the association between falls and clinical assessment tools in people with stroke. *Physical Therapy* 2009 (August); 89(8):816-825.

Invited Commentary by Escorpizo R, Cieza A, Stucki G, found in *Physical Therapy* 2009 (August); 89(8):825-827.

Author Response by Beninato, Portney and Sullivan, found in *Physical Therapy* 2009 (August); 827-828.

[PubMed Abstract:](#) [\(PubMed ID: 19520733\)](#)

Brown SC. Theory or theories? A commentary on 'initial steps toward a theory and praxis of person-environment interaction in disability.' Clinical Commentary on Jahiel and Scherer (2009). *Disability and Rehabilitation* 2010; 32(17):1475-1479.

[PubMed Abstract:](#) [\(PubMed ID: 20131950\)](#)

Clarke P, Nieuwenhuijsen ER. Environments for healthy ageing: A critical review. *Maturitas* 2009 (September 20); 64(1):14-19.

[PubMed Abstract:](#) [\(PubMed ID: 19695800\)](#)

Daley TC, Simeonsson RJ, Carlson B. Constructing and testing a disability index in a US sample of preschoolers and disabilities. *Disability and Rehabilitation* 2009; 31(7):538-552.

[PubMed Abstract:](#) [\(PubMed ID: 19031168\)](#)

Fox MH. Astute observations in their analysis of modifying existing person-environment interaction theory in disability. Clinical Commentary on Jahiel and Scherer (2009). *Disability and Rehabilitation* 2010; 32(17):1480-1481.

[PubMed Abstract:](#) [\(PubMed ID: 20131948\)](#)

Haak P, Lenski M, Hidecker MJC, Li M, Paneth N. Cerebral palsy and aging. *Developmental Medicine and Child Neurology* 2009 (October); 51(Suppl. 4):16-23.

[PubMed Abstract:](#) [\(PubMed ID: 19740206\)](#)

Jahiel RI, Scherer MJ. Initial steps towards a theory and praxis of person-environment interaction in disability. *Disability and Rehabilitation* 2009; Advance access published on March 29, 2010. 8 pages.

D9\OI:10.1080/09638280802590637. Accessed July 23, 2010.

[PubMed Abstract:](#) [\(PubMed ID: 19340619\)](#)

Jahiel RI, Scherer MJ. Jahiel-Scherer response. Commentary on Clinical Commentaries by Brown (2009) and Fox (2009). *Disability and Rehabilitation* 2009; 32(17):1482-1486.

[PubMed Abstract:](#) [\(PubMed ID: 20536362\)](#)

Jones GC, Sinclair LB. Multiple health disparities among minority adults with mobility limitations: An application of the ICF framework and codes. *Disability and Rehabilitation* 2008; 30(12-13):901-913.

[PubMed Abstract:](#) [\(PubMed ID: 18597985\)](#)

Jones GC, Rovner HW, Crews JE, Danielson ML. Effects of depressive symptoms on health behavior practices among older adults with vision loss. *Rehabilitation Psychology* 2009; 54(2): 164-172.

[PubMed Abstract:](#) [\(PubMed ID: 19469606\)](#)

Magasi S, Hammel J, Heinemann A, Whiteneck G, Bogner J. Participation: A comparative analysis of multiple rehabilitation stakeholders' perspectives. *Journal of Rehabilitation Medicine* 2009 (November); 41(11):936-944.

[PubMed Abstract:](#) [\(PubMed ID: 19841847\)](#)

Nieuwenhuijsen ER. An insider's view on person-centered rehabilitation: A case study. *Disability and Rehabilitation* 2009; 31(18):1529-1539.

[PubMed Abstract:](#) [\(PubMed ID: 19296314\)](#)

Resnik L, Plow MA, Jette A. Development of CRIS [Community Reintegration for Service Members]: Measure of community reintegration of injured service members. *Journal of Rehabilitation Research and Development* 2009; 46(4):469-480.

[PubMed Abstract:](#) [\(PubMed ID: 19882482\)](#)

[Through the courtesy of the publisher, a free copy is available without subscription on the World Wide Web.](#)

Resnik L, Plow MA. Measuring participation as defined by the International Classification of Functioning, Disability and Health: An evaluation of existing

measures. *Archives of Physical Medicine and Rehabilitation* 2009 (May); 90(5):856-866.

[PubMed Abstract:](#) [\(PubMed ID: 19406308\)](#)

Rundell SD, Davenport TE, Wagner T. Physical therapist management of acute and chronic low back pain using the World Health Organization's International Classification of Functioning, Disability and Health. Case Report. *Physical Therapy* 2009 (January); 89(1):82-90.

[PubMed Abstract:](#) [\(PubMed ID: 19008329\)](#)

Commentary by Escorpizo R, Cieza A, found in *Physical Therapy* 2009 (March); 89(3):308 [\(PubMed ID: 19251711\)](#)

Authors' Response by Rundell, Davenport, and Wagner, *Physical Therapy* 2009 (March); 89:309-310.

[Through the courtesy of the publisher, a free copy is available without subscription on the World Wide Web.](#)

Simeonsson RJ. Classifying functional manifestations of ectodermal dysplasias. *American Journal of Medical Genetics, Part A* 2009 (September); 149A(9):2014-2019.

[PubMed Abstract:](#) [\(PubMed ID: 19681156\)](#)

[Through the courtesy of the publisher, a free copy is available without subscription on the World Wide Web.](#)

Threats TT. The ICF and speech-language pathology: Aspiring to a fuller realization of ethical and moral issues. *International Journal of Speech-Language Pathology* 2010; 12(2):87-93.

[PubMed Abstract:](#) [\(PubMed ID: 20420350\)](#)

Whiteneck G, Dijkers MP. Difficult to measure constructs: Conceptual and methodological issues concerning participation and environmental factors. *Archives of Physical Medicine and Rehabilitation* 2009 (November); 90(Suppl. 1):S22-S35.

[PubMed Abstract:](#) [\(PubMed ID: 19892071\)](#)

Whiteneck G, Gassaway J. SCIREhab: A model for rehabilitation research using comprehensive person, process and outcome data. *Disability and Rehabilitation* 2010; 32(12):1035-1042.

[PubMed Abstract:](#) [\(PubMed ID: 20392171\)](#)