

**MEETING OF WHO COLLABORATING CENTRES  
FOR THE FAMILY OF INTERNATIONAL CLASSIFICATIONS**

Seoul, Korea  
10 Oct. -16 Oct 2009

**Annual Report of the WHO Collaborating Center for the Family of  
International Classifications for North America,  
October 2008 – September 2009**

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**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 2009-2013.*

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## 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 2009-2013. Of particular note are the following:

- Electronic publication by NCHS of preliminary mortality data for 2007, with release of final data planned by the end of 2009
- 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
- Publication by Statistics Canada of mortality data for 2005
- Provision of training courses in ICD-10 underlying cause of death coding for Canadian mortality coders
- Continued expansion of a national Coroner/Medical Examiner Database of standardized information on circumstances surrounding deaths reported to coroners and medical examiners in Canada
- Production of 2009 version (FY 2010) of ICD-9-CM, available on the web and as a CD ROM
- Publication by the Department of Health and Human Services of the final rule on adoption of ICD-10-CM and ICD-10-PCS to replace ICD-9-CM on January 16, 2009. The rule became effective on March 17, 2009, with implementation of the new code sets on October 1, 2013.
- Implementation of v2009 of ICD-10-CA and CCI completed.
- Updating of all existing education materials for Version 2009 of ICD-10-CA/CCI. All courses are developed and delivered in both English and French. Product topics include obstetrics, diabetes, acute coronary syndrome, classification of post-intervention conditions, version 2009 updates, diagnosis typing, knee replacement surgery, searching in an electronic infobase, trending using ICD-10-CA/CCI. Two new workshops are in development which will cover problem solving in coding complex cases and advanced issues in classifying post-intervention conditions. Two new self-directed learning products are under development on the topics of flaps/grafts and classification of ambulatory care cases. Tips for coders are posted to the Coders' Webpage on a biweekly basis.
- Posting the 2009 version of the Canadian Coding Standards for ICD-10-CA and CCI to the CIHI website February, 2009. Four new standards were written, 42 standards amended and 15 standards deleted. 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 12,000 queries. A fully bilingual (English/French) service was established in 2006.

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- 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 three major 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
  - Presentation by NCHS, during the week of June 8-12, 2009, of the first iteration 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. NCHS continues to follow up recommendations by the Consolidated Health Informatics (CHI) Disability Working Group, which named ICF as a CHI-endorsed vocabulary for exchanging electronic information for the functioning and disability domains in the United States. The Secretary of the Department of Health and Human Services accepted these recommendations, which were provided to the Healthcare Information Technology Standards Panel.
  - Convening a meeting among members of the Functioning and Disability Reference Group (FDRG) Task Group 1, "Principles of Use, Coding Rules and Guidelines," for ICF took place in Geneva, June 2 - 5, 2009. CIHI chairs this Task Group. The outcome and follow-up to the meeting were discussed during a teleconference of FDRG secretariat on June 23, 2009.
  - Continued leadership by NACC Head of the WHO-FIC Council, serving as Co-Chair for 2008 – 2009; 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 with WHO to improve reporting and functionality of ICD-10+ platform. A total of 70 update proposals for discussion in Seoul have been reviewed and posted for comment on the platform by the Secretariat.
  - Election of NACC Head in October 2008 as Co-Chair of the WHO-FIC Education Committee (EC), continuing her leadership of this Committee. The mid-year EC meeting was held in April 2009 in Raleigh, N.C., in conjunction with the Joint WHO-FIC – IFHRO Collaboration
  - Election of NACC (NCHS) representative in October 2008 to serve a two-year term as Co-Chair of the Family Development Committee (FDC). The Co-Chair and CIHI representative attended the July 2009 mid-year meeting of the FDC in St. Etienne, France, to discuss the International Classification of Health Interventions in July 2009.

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- Continued support and co-leadership by NACC (NCHS) for the WHO Mortality Reference Group (MRG), including convening a mid-year meeting in Raleigh, North Carolina, in March 2009.
  - Participation by CIHI and other North American members in the third mid-year meeting of the Morbidity Reference Group (MbrG) in Manly, Australia in March 2009.
  - Service by NACC (CIHI) representatives on the secretariat for the Functioning and Disability Reference Group (FDRG), which was founded at the 2006 WHO-FIC meeting in Tunis, as Chairs of Project 1 and Project 7 Task Groups.
  - NACC (NCHS and CIHI) 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.
  - NACC membership on all WHO-FIC Committees and Reference Groups, including Electronic Tools and Implementation Committees and the Terminology Reference Group.
  - Continued leadership by NCHS of the International Collaborative Effort (ICE) on Automating Mortality Statistics, including a meeting of the Planning Committee in Raleigh, N.C., in March 2009
  - Continued leadership by NCHS of the International Collaborative Effort (ICE) on Injury Statistics, including meetings in December 2008 and October 2009.
  - Hosting by CIHI of representatives from China and Sweden, 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 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 (by telephone) and CIHI representatives attended the spring meeting of the IHTSDO in Denmark April 1- 5, 2009 and will attend the October 5-8 meeting in Bethesda, MD.

**Title of Center:**

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

**Annual Report Year:** October 1, 2008- September 30, 2009

**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 delegation of fifteen persons from the U.S and Canada participated in the 2008 annual meeting of the WHO-FIC Network in New Delhi, India from October 26-31. The NACC Head also participated in a WHO post-conference on Public Health Informatics in Asia-Pacific Region on November 3-4, 2008. A NACC delegation will participate in the October 10-16, 2009 WHO-FIC Network annual meeting in Seoul, Korea.
- WHO staff (HQ) and PAHO staff participated in several ICD-related meetings organized by the North American Collaborating Center in March-April 2009.

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These included meetings of the ICE on Automated Mortality Statistics Planning Committee, the Mortality Reference Group and the Education Committee and its Joint Collaboration with IFHRO.

- 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 2009 and the SEG held bi-monthly teleconferences and a mid-year meeting in Geneva in April. The Council monitors and advances the Network Strategy and Work Plan and plans the annual meeting.
- The NACC Head and the URC Chair are members of the ICD Revision Steering Group (RSG), which met in Geneva in April 2009. The RSG also holds monthly teleconferences.
- The URC secretariat (ICD) and Family Development Committee Co-Chair (NCHS) participated in a three-day meeting of the Family Development Committee (FDC) held in July 2009 in Etienne, France; the principal topics for discussion were further development of an international interventions classification and the Nursing and Traditional Medicine classifications.
- The Chair of FDRG Project 1 Task Group on Coding Guidelines convened a meeting in Geneva in June 2009. The Chairs of Project 1 and 7 Task Groups also participated by phone in a portion of the FDRG meeting in Sao, Paulo, Brazil in July 2009.
- 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 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 and Executive Secretary 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) serves on the Secretariat for the WHO-FIC Functioning and Disability Reference Group (FDRG).
- U.S. and Canadian representatives of NACC serve on all WHO-FIC Committees and Reference Groups
- 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 NACC Head serves as a WHO-FIC representative on the Interim Harmonization Panel, which has contributed to development of an agreement between WHO and IHTSDO and planning for future work.

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 Dutch, German, Japanese, Korean (under designation), Mexican, Portuguese language (Brazil), United Kingdom (under re-designation) Centres participated in the April 2009 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.
- The North American Center participated in the March 2009 Morbidity Reference Group meeting in Manly, hosted by the Australian Centre. Other Centres participating were Australian, French, German, Italian, Nordic, Portuguese language (Brazil), and Japan.. .
- The NACC is working closely with the German Collaborating Centre on the web-based training tool for ICF.
- The NCHS representative to FDRG Project 8 Task Group participated in an ICF Ontology Development Workshop in Nottwil, Switzerland, hosted by the German Collaborating Center, in early December, 2008.
- Several Centres have participated in conference calls convened by the chair of the FDRG Project 1 Task Group on Coding Guidelines, as well as the in-person meeting in Geneva.



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## 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, 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 planned by the end of the year. 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 two training courses for U.S. coders in the use of ICD-10 in 2009. The course on the basics of coding underlying cause of death was offered in California, and the first week of the course on coding multiple causes of death was on the web. NCHS has developed an on-line electronic interactive basic multiple cause coding course on CD-ROM. The course is currently available on the Internet.

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 the next 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 2009, a total of 31 States, the District of Columbia, and New York City have implemented the revised death certificate. Implementation dates for the remaining States range from 2009 to 2012.

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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 largely in a developmental phase 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, 24 states, New York City and the District of Columbia have implemented an EDRS and 18 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 2009, 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 group 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 new Mexican 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.

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### Term of reference a) Major Activities

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

Since New Delhi, 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 2009 and September 2009). Information regarding the diagnosis proposals and a summary of the public discussion appear on the NCHS website at: [www.cdc.gov/nchs/otheract/icd9/maint/maint.htm](http://www.cdc.gov/nchs/otheract/icd9/maint/maint.htm). Information regarding the procedure proposals and a summary of the public discussion appear on the CMS website at:

[https://www.cms.hhs.gov/ICD9ProviderDiagnosticCodes/03\\_meetings.asp#TopOfPage](https://www.cms.hhs.gov/ICD9ProviderDiagnosticCodes/03_meetings.asp#TopOfPage)

The October 1, 2009 revisions to ICD-9-CM were posted on the NCHS website in June 2009 (<http://www.cdc.gov/nchs/datawh/ftpserv/ftp9cm/ftp9cm.htm#addenda>). The ICD-9-CM CD ROM containing the October 1, 2009 revisions is available from the Government Printing Office. There are 143 new diagnosis and 170 new external cause codes and 14 new procedure codes, which identify several important clinical concepts and procedures that were not previously captured in ICD-9-CM. These include expansions to: identify acute and chronic venous embolism and thrombosis of deep vein and superficial vessels, autoimmune lymphoproliferative syndrome, chronic pulmonary embolism, gouty arthropathy, hypoxic ischemic encephalopathy, merkel cell carcinoma, novel H1N1 influenza virus, poisoning by psychostimulants, external cause of injury status and activity codes. Several new procedure codes have been created for cardiac contractility modulation, laser interstitial thermal therapy, bronchial valve insertion, colonic stents, and arthrotomy for removal of prostheses without replacement.

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 2008 cycle met the criteria for an expedited April 2009 update (focus on new technology and limited to those that have a strong and convincing case). The Coordination and Maintenance Committee will begin discussing during its September 2009 meeting 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 work toward a representation of ICD-9-CM (and ICD-10-CM) in a structured, i.e., database, format and integration of this representation into its annual production processes. The work, conducted through a collaborative effort with the National Library of Medicine (NLM), will 1) enable electronic transmission of ICD-9-CM from NCHS to key NCHS partners such as the NLM, 2) support improved connectivity of ICD-9-CM with other national standard terminologies such as SNOMED CT and CPT-4, and 3) preserve current NCHS ICD-9-CM production processes. It is envisioned that this work, begun in 2005, also will be used by NCHS

to apply similar design and support methodologies to the development of an electronic model and maintenance process for ICD-10-CM.

Currently, NCHS continues to maintain and release ICD-9-CM using a Folio-based production system. 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. An "official" electronic distribution of ICD-9-CM would also reduce the proliferation of divergent electronic ICD-9-CM variants within the industry. A beta version of the database will be tested over the next six months with the intention of migrating future versions of ICD-9-CM in a machine-readable format in addition to the Folio-based version.

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### Term of reference a) Major Activities

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

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 2009 revised draft of ICD-10-CM and general equivalence mappings with ICD-9-CM were posted on the NCHS website at the end of 2008. An updated version will be posted in December 2009.

The implementation of ICD-10-CM is linked with the administrative simplification provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA). On August 22, 2008, the Department of Health and Human Services published a notice of proposed rulemaking recommending adoption of ICD-10-CM and ICD-10-PCS to replace ICD-9-CM as of October 1, 2011. The public comment period for the proposed rule closed on October 21, 2008. 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 ICD-10-CM prior to October 1, 2013 are scheduled to be held during the September ICD-9-CM Coordination and Maintenance Committee meeting. The public comments will be incorporated into a notice of proposed rulemaking when CMS proposes changes to the MS-DRG based on ICD-10-CM and ICD-10-PCS. NCHS and CMS will continue to update ICD-9-CM until such time that a final rule has been published that designates the final year for updating of ICD-9-CM and the restarting of the updating of ICD-10-CM and ICD-10-PCS.

NCHS and CMS have conducted several conference call outreach initiatives between September 2008 and 2009. The audiences for the outreach calls included Medicare contractors, physician offices, hospitals, physician specialty groups and their representatives. Materials developed for the calls are available on the CMS website. NCHS also has partnered with the American Hospital Association and the American Health Information Management Association to further educational outreach on ICD-10-CM.

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

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**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 and in the use of MMDS, NCHS automated mortality classification software in Canada (ongoing). A Basic Underlying Cause-of-Death Classification course was presented in January 2009.
- Provide updated specifications to provinces and territories for producing mortality data (ongoing) (Latest update planned for distribution this autumn.)
- 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 an electronic publication, Leading Causes of Death 2000-2004, December 2008
- Released, as electronic publications, Causes of Death 2005, Leading Causes of Death 2005 and Summary List of Causes 2005, March 2009
- 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 the Joint Collaboration's pilot of the ICD-10 underlying cause-of-death examination and certification program, chairing the pilot exam workgroup.
- 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 and begin to analyze and report on 2006 data collected.

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**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)
- Investigated feasibility of development of an online application of ICD-10-CA and CCI assessment tool.
- Two new face-to-face workshops under development for delivery in 2009/10:  
Meeting the Challenge – Justifying Your Coding Decisions and Post-Intervention Data Collection
- 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 12,000 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 was posted to the CIHI website February, 2009. Four new standards were written, 42 standards amended and 15 standards deleted. This manual is available in English and French.
- Implementation of v2009 of ICD-10-CA/CCI completed



- Because ICD-10-CA/CCI has been in use in Canada for several years, the National ICD-10-CA/CCI Electronic Products User Group has been changed to the National ICD-10-CA/CCI Electronic Products Advisory Committee. The purpose of this committee is to provide advice to CIHI in the development of new, and enhancement of existing, ICD-10-CA and CCI electronic products. This committee will meet 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. A total of 70 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.
- All 70 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
- 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.

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## Term of reference a) Major Activities

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

Since the 2008 WHO-FIC Network Annual Meeting in Delhi, the NACC has encouraged adoption and supported implementation of the ICF in the United States through activities related to Education, Informatics, Advocacy, and Scientific Publishing.

#### 1) Education:

The NACC hosted nine consecutive annual Conferences on the ICF during this decade and five in the previous decade. The Collaborating Center benefits from the participation of many clinicians, scientists, and students in the U.S. and Canada, who are applying the ICF and report on their findings. The conferences also serve an educational function. The conference alternates between American and Canadian venues; the most recent NACC ICF Conference was held in Québec City in August, 2008. We anticipate being able to host the next NACC ICF Conference in June 2010, in the Washington, D.C. area.

During 2009, the financial resources within the Collaborating Center were too constrained to conduct and host a full-fledged ICF Conference. Nonetheless, in keeping with the Collaborating Center's commitment to continuing education in working with the Family of International Classifications, a low-cost, time-efficient "educational event" about the ICF was organized, in lieu of a formal ICF Conference.

Using electronic resources provided by the U.S. Centers for Disease Control and Prevention, during the second week in June 2009, NACC presented the first iteration 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. These "web seminars" were presented over the Internet at designated times, using a password-protected Internet website to which any person could gain access, and a simultaneous audio telephone conference call.

Each web seminar originated from Hyattsville, Maryland, and accommodated participants who logged on from around the U.S. and Canada. Each web seminar was 90 minutes in duration, and included 4 modular components and an equivalent amount of time for discussion and questions. Instruction about ICF coding was emphasized throughout the Seminar Series. Participation in the ICF Web Seminar Series was free-of-charge, and did not require any pre-registration. The average number of participants during each seminar was 39.

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The first lecture, entitled "An Introduction to the ICF," was presented on Tuesday, June 9, 2009. The second, entitled "ICF Coding," was presented on Thursday, June 11, 2009. The third and final web-enabled lecture, entitled "Frequently Asked and Answered Questions About the ICF," was presented on Friday, June 12, 2009. It featured the answers to simple and complicated questions about the ICF that we had heard or handled during many of the previous face-to-face NACC ICF Conferences.

During each seminar, many photographic examples of illustrative ICF coding were presented. Specifically, we utilized many winning photographs from the WHO "Images of Disability" photo contests, with a description of observable characteristics, and potentially relevant ICF coding superimposed on each photograph for teaching purposes. We also presented a brief ICF coding case study, respectfully utilizing photographs of Franklin D. Roosevelt, who served as U.S. President between 1933 – 1945 and experienced mobility impairment during most of his adult life.

We are adapting the June, 2009 web seminar prototypes into a more permanent set of ICF-instructional seminars available on the Internet, to complement the Collaborating Center's existing educational product called "Code ICF," and in support of the WHO-FIC "ICF e-Learning Tool." We also plan to reprise the ICF Web Seminar Series in the U.S. and Canada on December 1, 2 and 3, 2009, and depending on demand, periodically again in the future.

The NCHS ICF lead responds regularly to requests for information about ICF and its application, provides support and consultation to U.S. stakeholders for ICF, represents U.S. interests in the evaluation and enhancement of ICF and contributes ICF expertise to the WHO-FIC Education Committee and Functioning and Disability Reference Group. He also contributes ICF-oriented content and expertise to the federal Interagency Subcommittee on Disability Statistics (ISDS), which he co-chairs.

2) Informatics:

*Unified Medical Language System*

The Collaborating Center has worked closely with WHO and the National Library of Medicine (NLM) to assure the inclusion in 2009 of the ICF and ICF-CY as two of the electronic source vocabularies incorporated in the NLM's Unified Medical Language System (UMLS). This represents an important technological and intellectual milestone in the overall implementation of ICF in the United States, where the two classifications are freely available through the UMLS.

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Federal partners which have financially supported the licensure of the ICF and ICF-CY within the UMLS have included the National Center for Health Statistics, Social Security Administration, the Office of the National Coordinator for Health Information Technology, and the Department of Health and Human Services Office on Disability.

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.

The UMLS provides the electronic structure and environment to pursue this kind of mapping, which in turn enables and promotes the "translation" of concepts from one vocabulary source to others. The UMLS Fact Sheet provides this description:

"The purpose of NLM's Unified Medical Language System (UMLS<sup>®</sup>) is to facilitate the development of computer systems that behave as if they 'understand' the meaning of the language of biomedicine and health. To that end, NLM produces and distributes the UMLS Knowledge Sources (databases) and associated software tools (programs) for use by system developers in building or enhancing electronic information systems that create, process, retrieve, integrate, and/or aggregate biomedical and health data and information, as well as in informatics research."

With this new UMLS development, capabilities for mapping the ICF have expanded beyond the rudimentary two-dimensional mapping strategies that many ICF users have already pursued, now to enable more complex multi-dimensional mapping strategies.

In the two-dimensional approach, it is easy and straightforward to link one or a set of unmodified ICF codes with exactly-matching, closely-matching, or "satisfactorily-matching" terms or concepts in an alternate source, such as another classification or an existing functional assessment instrument. However, this approach negates the Coder's abilities to discern matches between and among ICF coded terms and the corresponding terms within more than one alternate source. This approach also mitigates utilizing the full range of ICF codes that incorporate qualifier digits.

To take advantage of all the opportunities afforded by mapping, ICF coders need multi-dimensional mapping strategies, which in turn generally require computerized representations of alternate vocabularies on many levels. Even multi-dimensional maps can be simple or only contain a small set of matched terms among several source vocabularies. Generally though, we want multi-

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dimensional strategies to enable the development of complex, robust maps among many or all ICF terms and one or several other relevant UMLS sources.

Through 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) Advocacy:

In both Canada and the U.S., the Collaborating Center advocates for appropriate adoption and incorporation of the ICF into the respective health care and data exchange systems. This is supported in the U.S. by the National Committee on Vital and Health Statistics (NCVHS), the federal advisory committee on health information policy. In July, 2001, not long after publication of the ICF by WHO, the NCVHS issued a seminal report entitled "Classifying and Reporting Functional Status" (<http://www.ncvhs.hhs.gov/010617rp.pdf>), which specifically pointed to the new ICF as "the only existing classification system that could be used to code functional status across the age span" (2001, pg. 13).

As a component of the June 2009, "ICF Web Seminar Series," and in conjunction with a regularly-scheduled quarterly meeting of the NCVHS, the Collaborating Center arranged for Dr. Lisa I. Iezzoni to offer a lecture on the subject of the ICF, incorporating both general and specific recommendations for implementing the ICF in American health care systems. The NCVHS meetings are open to the public and are available for listening in real-time through an Internet audio service; many of the ICF Web Seminar Series participants during the instructional lectures that week also listened in on the invited lecture.

Dr. Iezzoni, a well-known health services researcher affiliated with the Institute for Health Policy at Massachusetts General Hospital, formerly had served as a member of the NCVHS and had chaired the Committee's 2001 report; she also had served during 2005-2007 as a member of the Institute of Medicine's Committee on the Future of Disability in America, which recommended adoption of the ICF framework, as well as refinements and improvements to ICF. Her lecture, "Are the Stars Aligned for ICF in the U.S.?" is available at this site:

<http://www.ncvhs.hhs.gov/090610ag.htm>

The Committee expressed its continued support for collecting functional status information and asked several questions about operationalizing the ICF coding system for this purpose.

4) Scientific Publishing:

During this reporting period, many professionals who have participated in NACC activities have been actively contributing to the compendium of ICF publications.

The following rosters represent selections from that compendium, published or released in scientific journals, periodicals, or books during this 2008-2009 reporting period. The first roster represents selected publications in which the first author had been affiliated with an institution located in the United States. The second roster of citations represents the similar output among first authors affiliated with Canadian institutions.

From institutions in the United States

Bedell G, Coster W. Measuring participation of school-aged children with traumatic brain injuries: Considerations and approaches. *Journal of Head Trauma and Rehabilitation* 2008; 23(4):220-229.

[PubMed Abstract](#) (PubMed ID: 18650766)

Cibulka MT, White DM, Woehrle J, *et al.* Hip pain and mobility deficits -- hip osteoarthritis. Clinical practice guidelines linked to the International Classification of Functioning, Disability, and Health from the Orthopaedic Section of the American Physical Therapy Association. *Journal of Orthopaedic and Sports Physical Therapy* 2009 (April); 39(4):A1-A25. DOI:10.2519/jospt.2009.0301. Accessed July 30, 2009.

Through the courtesy of the publisher, a .PDF copy of the article is available without a subscription:

<http://www.jospt.org/members/getfile.asp?id=4393> .

[PubMed Abstract](#) (PubMed ID 19352008)

[Publisher's Abstract](#)

Childs JD, Cleland JA, Elliott JM, *et al.* Neck pain. Clinical practice guidelines linked to the International Classification of Functioning, Disability, and Health from the Orthopaedic Section of the American Physical Therapy Association. *Journal of Orthopaedic and Sports Physical Therapy* 2008 (September); 38(9):A1-A34. DOI:10.2519/jospt.2008.0303. Accessed July 30, 2009.

Through the courtesy of the publisher, a .PDF copy of the article is available without a subscription:

<http://www.jospt.org/members/getfile.asp?id=4395> .

[PubMed Abstract](#) (PubMed ID 18758050)

[Publisher's Abstract](#)

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

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

Fox MH, Rowland JL, Froelich-Grobe K, Vernberg D, White GW, Haskett L. Determining paralysis prevalence in the United States. *Disability and Health Journal* 2008; 1:172-179.

[Publisher's Abstract](#)

Freedman VA. Adopting the ICF language for studying late-life disability: A field of dreams? *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences* 2009. Advance access published on July 17, 2009. 3 pages. DOI:10.1093/gerona/glp095. Accessed July 30, 2009.

[PubMed Abstract](#) (PubMed ID: 19617529)

Godges JJ, Irrgang JJ. ICF-based practice guidelines for common musculoskeletal conditions. Editorial. *Journal of Orthopaedic and Sports Physical Therapy* 2008 (April); 38(4):167-168.

[PubMed Abstract](#) (PubMed ID: 18434668)

[Publisher's Abstract](#)

Guralnick JM, Ferrucci L. The challenge of understanding the disablement process in older persons. Commentary responding to Jette AM. Toward a common language of disablement. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*. Advance access published on July 23, 2009. 3 pages. DOI:10.1093/gerona/glp094. Accessed July 30, 2009.

[PubMed Abstract](#) (PubMed ID: 19628636)

Helgeson K, Smith AR Jr. Process for applying the International Classification of Functioning, Disability and Health model to a patient with patellar dislocation. *Physical Therapy* 2008 (August); 88(8):956-964.

[PubMed Abstract](#) (PubMed ID: 18556399)

Jette AM. Toward a common language of disablement. Guest editorial. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences* 2009. Advance access published on July 17, 2009. 4 pages.

DOI:10.1093/gerona/glp093. Accessed July 30, 2009.

[PubMed Abstract](#) (PubMed ID: 19617528)

Jette AM. Beyond dueling models. Commentary responding to: Guralnik JM, Ferrucci L. The challenge of understanding the disablement process in older persons, and Freedman V. Adopting the ICF language for studying late-life disability: A field of dreams? *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*. Advance access published on July 17, 2009. 2 pages. DOI:10.1093/gerona/glp096. Accessed on July 30, 2009.

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[PubMed Abstract](#) (PMID: 19617527)

Krahn GL, Fujiura G, Drum CE, Cardinal BJ, Nosek MA, and the RRTC Expert Panel on Health Measurement. The dilemma of measuring perceived health status in the context of disability. *Disability and Health Journal* 2009; 2:49-56.

[Publisher's Abstract](#)

McPoil TG, Martin RL, Cornwall MW, Wukich DK, Irrgang JJ, Godges JJ. Heel pain -- plantar fasciitis. Clinical practice guidelines linked to the International Classification of Functioning, Disability, and Health from the Orthopaedic Section of the American Physical Therapy Association. *Journal of Orthopaedic and Sports Physical Therapy* 2008 (April); 38(4):A1-A18. DOI:10.2519/jospt.2008.0302. Accessed July 30, 2009. Through the courtesy of the publisher, a .PDF copy of the article is available without a subscription:

<http://www.jospt.org/members/getfile.asp?id=4158> .

[PubMed Abstract](#) (PubMed ID: 18434670)

[Publisher's Abstract](#)

Mulhorn KA, Threats TT. Speech, hearing, and communication across five national disability surveys: Results of a DISTAB study using the ICF to compare prevalence patterns. *International Journal of Speech-Language Pathology* 2008; 10(1-2):61-71.

[Publisher's Abstract](#)

Rejeski WJ, Ip EH, Marsh AP, Miller ME, Farmer DF. Measuring disability in older adults: The International Classification System of Functioning, Disability and Health (ICF) framework. *Geriatrics and Gerontology International*. 2008; 8:48-54.

[PubMed Abstract](#) (PubMed ID: 18713189)

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. *Physical Therapy* 2009 (January); 89(1):82-90. Commentary in

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

Seelman KD. Converging, pervasive technologies: Chronic and emerging issues and policy adequacy. Perspective. *Assistive Technology* 2008; 20:126-137.

[PubMed Abstract](#) (PubMed ID: 18939653)

Van Naarden Braun K, Yeargin-Allsopp M, Lollar DJ. Activity limitations among young adults with developmental disabilities: A population-based follow-up study. *Research in Developmental Disabilities* 2009; 30:179-191.

[PubMed Abstract](#) (PubMed ID: 18455365)



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Wasiak R, Young AE, Dunn KM, Côté P, Gross DP, Heymans MW, von Korff M. Back pain recurrence: An evaluation of existing indicators and direction for future research. *Spine* 2009; 34(9):970-977.

[PubMed Abstract](#) (PubMed ID: 19532005)

From institutions in Canada

Anaby D, Miller WC, Eng JJ, *et al.* Can personal and environmental factors explain participation of older adults? *Disability and Rehabilitation* 2009; 31(15):1275-1282.

[PubMed Abstract](#) (PubMed ID: 19340617)

Badley E. Prof. Philip H. N. Wood. Obituary. *Rheumatology* 2009; 48:456-457. Advance access published on February 12, 2009. 2 pages.

DOI:10.1093/rheumatology/kep014. Accessed on July 30, 2009.

[Publisher's Abstract](#)

Berg K, Finne-Soveri H, Gray L, *et al.* Relationship between interRAI HC and the ICF: Operationalizing the ICF. *BMC Health Services Research* 2009; 9:47. 11 pages. DOI:10.1186/1472-6963-9-47. Available free-of-charge on the World Wide Web at:

<http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=2666676&blobtype=pdf>. Accessed on July 30, 2009.

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

Bickenbach JE. Disability, culture and the UN convention. *Disability and Rehabilitation* 2009; 31(14):1111-1124.

[PubMed Abstract](#) (PubMed ID: 19479537)

Forhan M. An analysis of disability models and the application of the ICF to obesity. *Disability and Rehabilitation* 2009; 31(16):1382-1388.

[PubMed Abstract](#) (PubMed ID: 19340616)

Levin MF, Kleim JA, Wolf SL. What do motor “recovery” and “compensation” mean in patients following stroke? *Neurorehabilitation and Neural Repair* 2009; 23(4):313-319.

[PubMed Abstract](#) (PubMed ID: 19118128)

McDougall J, Wright V. The ICF-CY and Goal Attainment Scaling: Benefits of their combined use for pediatric practice. *Disability and Rehabilitation* 2009; 31(16):1362-1372.

[PubMed Abstract](#) (PubMed ID: 19340620)

Moriello C, Byrne K, Cieza A, Nash C, Stolee P, Mayo N. Mapping the Stroke Impact Scale (SIS-16) to the International Classification of

Functioning, Disability and Health. *Journal of Rehabilitation Medicine* 2008; 40:103-106.

[PubMed Abstract](#) (PubMed ID: 18509573)

Skarakis-Doyle E, Doyle PC. The ICF as a framework for interdisciplinary doctoral education in rehabilitation: Implications for speech-language pathology. *International Journal of Speech-Language Pathology* 2008; 10(1-2):83-91.

[Publisher's Abstract](#)

Thomas-Stonell N, Oddson B, Robertson B, Rosenbaum P. Predicted and observed outcomes in preschool children following speech and language treatment: Parent and clinician perspectives. *Journal of Communication Disorders* 2009; 42:29-42.

[PubMed Abstract](#) (PMID: 18835607)

Veillette N, Demers L, Dutil E, McCusker J. Development of a functional status assessment of seniors visiting emergency department. *Archives of Gerontology and Geriatrics* 2009; 48:205-212.

[PubMed Abstract](#) (PMID: 18295360)

Wright FV, Rosenbaum PL, Goldsmith CH, Law M, Fehlings DL. How do changes in body functions and structures, activity, and participation relate in children with cerebral palsy? *Developmental Medicine and Child Neurology* 2008; 50:283-289.

[PubMed ID and Abstract](#) (PMID: 18312423)

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### 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 received several copies of the recently published French translation of ICF-CY, Classification internationale du fonctionnement, du handicap et de la santé Version pour enfants et adolescents (CIF-EA) from the French WHO Collaborating Centre in Paris. The letter that accompanied copies of the CIF-EA book from the French centre, Centre Technique National d'Etude et de Recherches sur les Handicaps et les Inadaptations (CTNERHI) stated: "As a token of our thanks for the priceless assistance of the Canadian Institute for Health Information in providing the French WHO Collaborating Centre the French translation of the initial ICF some years ago!"
- CIHI contributed ICF information and perspective to the Federal Disability Report (2008) / Rapport fédéral sur les personnes handicapées (2008) for the federal government Office for Disability Issues. The report was published in February 2009
- In October 2009 CIHI responded to a federal parliamentary inquiry about the use of ICF in Canada.
- CIHI hosted a visitor from the province of Alberta and provided information on ICF and discussed opportunities for application of ICF within their context.
- CIHI explored and supported opportunities for the use of ICF with representatives for Children and Youth in British Columbia.
- CIHI was part of the initial discussions with Dr. Katherine Berg, Chair of the Department of Physical Therapy at the University of Toronto, WHO-FIC and InterRAI for exploring opportunities for mapping ICF and the interRAI assessment instruments. Dr. Berg published her article in January 2009: "Relationship between interRAI HC and the ICF: opportunity for operationalizing the ICF" Authors: Katherine Berg, Harriet Finne-Soveri, Len Gray, Jean Claude Henrard, John Hirdes, Naoki Ikegami, Gunnar Ljunggren, John N Morris, Louis Paquay, Linda Resnik, Gary Teare; BMC health services research. 01/02/2009; 9:47.  
ISSN: 1472-6963
- CIHI continues to collaborate with the research team for the PT and OT Paediatric Clinician's Network in Manitoba, Canada. The project is using ICF to develop a database for children receiving PT or OT services in Manitoba.
- CIHI provided a presentation at The Rehabilitation of Function, The Function of Rehabilitation conference in Alberta in March 2009 on the Application of ICF in Rehabilitation.

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- CIHI has been invited to make a presentation on ICF in Paediatrics and participate on an expert panel at the annual conference of the Canadian Association of Paediatric Health Centres in Halifax October 2009.
  - 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 two international teleconferences and a meeting of this group in Geneva, June 2009. A second meeting of a smaller number of the members was held in Toronto in August 2009.
  - A CIHI representative leads Project 7 – Environmental Factors.
  - Provides support and consultation to Canadian stakeholders for ICF (ongoing)
  - 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 fourth plenary meeting of the ICE on Automation was held on May 7-9, 2008 in Silver Spring, Maryland. Twenty-eight countries were represented at the meeting, including countries from Central and Eastern Europe, Latin America, Africa and Asia. Also present at the meeting were representatives of WHO, the Health Metrics Network, and the MEASURE/Evaluation group. The meeting included presentations on a variety of topics including electronic death registration, certification of cause of death, coder training, the output of automated coding systems, the use of automated coding in countries with incomplete data systems, and presentation of the IRIS system. A major aim of the meeting was to promote the IRIS system, including several presentations on the details of the system, and a hands-on workshop to demonstrate how the system works.

The ICE Planning Committee met in March 2009 in Raleigh, North Carolina. 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 2010 meetings of the ICE, MRG, and other groups will take place in Germany.

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## Term of reference b) Major Activities

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

The 15th meeting of the International Collaborative Effort (ICE) on Injury Statistics took place in December 2008 in Washington DC. Participants from 14 countries attended. WHO was represented by its Geneva office.

The priority projects for the two-day meeting included injury indicator development for fatal and nonfatal injury as well as for long-term disability following injury. Additionally, a workgroup has been convened to assess the best measures of injury severity.

ICE on Injury Statistics participants are working closely with the Global Burden of Disease (GBD) Injury Expert Group (<http://sites.google.com/site/gbdinjuryexpertgroup/Home>). Many of the core members of this group are also long-time participants in the ICE on Injury Statistics.

The full agenda and list of participants can be found on the ICE website, <http://www.cdc.gov/nchs/about/otheract/ice/meetings.htm>

The next meeting of the Injury ICE will be held in October 2009 in Boston, Massachusetts and will be in conjunction with the GBD Injury Meeting. The 2009 meeting is co-sponsored by NCHS and the World Bank.

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.

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**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.



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## Term of reference c) Major Activities

### Participation in WHO-FIC Committees and Reference Groups

#### 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 plans the annual meeting. The Center Head began a second two-year term as co-chair of the Council following the 2007 Network meeting. During 2009, the Council held four teleconferences, two of which were held from Geneva and replaced the mid-year face-to-face meeting. As Council Co-Chair, the Head serves on the Council's Small Executive Group (SEG), which prepares documents and recommendations for Council discussion and approval. The SEG met in person in Geneva in April and 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.

#### 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. The Committee meets during the annual WHO-FIC Network meeting, holds a mid-year meeting and also communicates by e-mail and bi-monthly conference calls. 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 April 2009, the EC and JC met in Raleigh, NC to

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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.

#### **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 2009 mid-year meeting was held in Raleigh, North Carolina. An additional meeting is being organized prior to the 2009 WHO-FIC Network meeting in Seoul.

#### **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 provides the Co-Chair and Secretariat support to ICD updating process. The 2008 updates were posted to the WHO website in June 2009. Seventy proposals have been received for discussion at the October 2009 meeting in Seoul, Korea. The first round of voting was completed July 3, 2009.

#### **6. Family Development Committee**

The Center Head, 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, the Family concept, ICF-CY and United Nations classifications. NCHS and CIHI participated in meetings in St. Etienne 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.

## 8. Morbidity Reference Group

Mea Renahan, Lori Moskal, and Sue Bowman participated in the mid-year meeting of the Morbidity Reference Group held in Manly, Australia in March 2009. Donna Pickett of the U.S., and Maureen Aucoin and Ginette Therriault of Canada provided input to the documents prior to the meeting. Two papers were discussed. One outlines the conventions that should be used in ICD-11. The second paper describing known issues for ICD-11 was revised and sent to the ICD Revision Steering Group (RSG) for consideration in their deliberations in Geneva in April 2009. Mea Renahan presented the paper at the Geneva meeting. A definition of the main condition for ICD-11 was also discussed.

## 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 as 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, Andrew MacKenzie, Susan Stobert, , Hisao Sato, Nenad Kostanjsek and Mary-Ann O'Donovan . This year's activities have focused mainly on drafting the ICF Guidelines and Principles of Use together with an explanatory Matrix tool for the users of the ICF in different settings. NACC participants contributed substantially to the documentation developed by the Task Group, which was presented for ongoing review during the FDRG Mid-Year Meeting in Sao Paulo, Brazil, July 28-30, 2009.

Work on "Project 7" in 2008-2009 has focused on continuing the drafting of a paper in collaboration with Swiss Paraplegic Research entitled "Operationalizing Environmental Factors" (J Reinhardt, J Miller, G Stucki, D Gray). The scope of the initial draft was diverse and included conceptual aspects of measurement of environmental factors as well as technical aspects (e.g., psychometrics of existing measures and ICF linking to those measures). The current plan proposed for publication(s):

- submit a conceptual paper for Soc Sci Med including some sections on the definition of environment and one on ecological validity (Bronfenbrenner 1979)
- submit a paper to Disability and Rehabilitation focused on psychometrics of existing measures of the environment and linking to ICF

- finalize the larger foundation paper as a reference document for FDRG / TG 7 work. One option being considered is to submit the paper and a poster for the annual WHO-FIC meeting, October 2009.

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, 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 third meeting in New Delhi, India.

#### **11. Revision Steering Group**

The NACC Head and the co-chair of the Update and Revision Committee (ICD) serve on the Revision Steering Group (RSG) for ICD-10. Both participated in the April 2009 RSG meeting in Geneva and on monthly teleconferences. NCHS and CIHI representatives will participate in the ICD-11 Revision iCamp from September 22 – October 2, 2009 in Geneva; the meeting will launch the alpha drafting process for ICD-11.

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### 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), 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 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 Andy Wiesenthal of Kaiser Permanente, and on the Member Operational Liaison Forum by Jan Willis. 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. 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 (by phone), CIHI and Canadian colleagues participated in the IHTSDO meetings in Helsingor, Denmark, Oct 29- Nov 2 2008 and April 1-5, 2009 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 5-8 IHTSDO meetings in Bethesda, Maryland, USA.

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. Ginette Therriault made a presentation with Sharilyn Kmech at the CHI Partnership conference 14 – 16 May 2009 in Calgary, Alberta providing an update on the work of the MapSIG group. New initiatives under this collaboration are the French translation of SNOMED-CT and the building of maps between SNOMED-CT and ICD-10-CA and CCI.

CIHI collaborates with Dr. Francis Lau on a reverse mapping project from ICD-10 to SNOMED CT. The 5000 most frequent ICD codes used in Canada and New-Zealand were used for this project. The intent was to prioritize the concepts translated into French for use of SNOMED CT in Canada. Translation has begun.

The NACC Head has served as a WHO-FIC representative on the Interim Harmonization Panel, which reviewed the draft agreement between WHO and IHTSDO.

## **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 changes within the Canadian and American federal governments that affect broader implementation of the ICF. The ICF Newsletter remains one of the Collaborating Center's most widely-recognized resources.

Anyone can receive the ICF Newsletter by sending an E-mail message with complete contact information to John Hough at [JHough@cdc.gov](mailto:JHough@cdc.gov) or Linda Washington at [LRWashington@cdc.gov](mailto:LRWashington@cdc.gov). Archived versions of previous issues of the Newsletter can be viewed on the NACC ICF website at: <http://www.cdc.gov/nchs/about/otheract/icd9/icfhome.htm>.

## **Term of reference f) Major Activities**

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

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. 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 are on hold, due to the departure of senior training staff in recent years. International courses will be reinstated once training staff have been replaced and new staff have acquired sufficient training experience. In the meantime, 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 a web-based training 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.

### 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/about/otheract/icd9/nacc\\_ed\\_committee.htm](http://www.cdc.gov/nchs/about/otheract/icd9/nacc_ed_committee.htm)

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.

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## 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 in the medical/surgical section (4740 new codes added, 4,088 codes revised, 19,067 codes deleted). The net impact of the changes resulted in a decrease in the number of codes in ICD-10-PCS from 86,916 to 72,589. None of the changes resulted in changes to the draft coding guidelines. All maps between ICD-9-CM procedure codes and ICD-10-PCS were also updated subsequent to the October 2008 updates for ICD-9-CM, Volume 3.

CMS continues to work on converting the DRGs into ICD-10-CM and ICD-10-PCS with a goal to complete a prototype of the DRGs in the new code sets by the end of 2009. A summary of the work completed was presented during the September 16, 2009 ICD-9-CM Coordination and Maintenance Committee meeting.

Highlights regarding the 2009 update to ICD-10-PCS may be found on the CMS website: [http://www.cms.hhs.gov/ICD10/Downloads/pcs\\_whats\\_new\\_2008.pdf](http://www.cms.hhs.gov/ICD10/Downloads/pcs_whats_new_2008.pdf)

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 St. Etienne in July, 2009 on further development of an International Interventions classification.

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

### Work Plan 2009 - 2013

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:	<b>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.</b>
	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. Implementing ICD-10 for each of these broad areas involves an elaborate number of steps. Annual training is done 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: Implement ICD-10 for mortality effective with deaths occurring in 1999 as collaborative effort with the States
	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

Activity 2:	<b>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</b>
	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:	<b>Title: Promote the development and use of ICD-10 for mortality statistics in Canada – Production of data and publication of reports</b>
	Responsible person: Julie McAuley, 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 2005)
	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: Web and print publications and public use data
	Time frame of the activity: Ongoing

Activity 4:	<b>Title: Revision of U.S. Standard Certificates of Birth, Death, and Fetal Death</b>
	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 – 2012

Activity 5:	<b>Title: Move towards an electronic death registration system in the United States</b>
	Responsible person: Dr. Robert Anderson, Chief, Mortality Statistics Branch, Division of Vital Statistics (DVS), NCHS, CDC
	Description: Adoption of electronic death registration systems have 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 Automated Mortality Data and WHO-FIC meetings
Time frame of the activity: 2003-2013	
Activity 6:	<b>Title: Promote the use of ICD-10 for mortality classification through technical assistance to other countries</b>
	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:	<b>Title: NCHS leadership of International Collaborative Effort on Automating Mortality Statistics</b>
	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 met in March 2009.

	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:	<b>Title: Statistics Canada participation in International Collaborative Effort on Automating Mortality Statistics</b>
	Responsible person: Julie McAuley, 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:	<b>Title: Develop international training courses in ICD-10 mortality coding</b>
	Responsible person: Donna Glenn, Survey Statistician, 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 recently retired training staff have been replaced and new staff have acquired sufficient training experience

Activity 10:	<b>Title: Develop comparability ratios for ICD-10 mortality statistics in the United States</b>	
	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:	<b>Title: Develop comparability ratios for ICD-10 mortality statistics in Canada</b>	
	Responsible person: Julie McAuley, 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:	<b>Title: Promote the use of ICD-9-CM for morbidity applications in the United States</b>	
	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:	<b>Title: Develop, implement and promote the use of ICD-10-CM for morbidity applications in the United States</b>	
	Responsible person:: Donnamaria Pickett, Medical Systems Administrator, Classifications and Public Health Data Standards Staff (CPHDSS), NCHS, CDC	
	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. <a href="http://www.cdc.gov/nchs/about/otheract/icd9/icd10cm.htm">http://www.cdc.gov/nchs/about/otheract/icd9/icd10cm.htm</a>	
	Concrete expected outcome: ICD-10-CM will replace ICD-9-CM, Volumes 1 and 2.	
	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.	
	Source of funding of the activity: NCHS	
	Dissemination of the results: The 2007 version of ICD-10-CM has been posted on the NCHS classifications website and will be replaced by the 2009 version: <a href="http://www.cdc.gov/nchs/about/otheract/icd9/abtcd10.htm">http://www.cdc.gov/nchs/about/otheract/icd9/abtcd10.htm</a> The classification will be available in books, on CD-ROM and in database version.	
	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. .	

Activity 14:	<b>Title: Develop, implement and promote the use of ICD-10-CA for morbidity applications in Canada, including development and conduct of education programs</b>
	Responsible person: Mea Renahan, Manager, Classifications; Lori Moskal, Ginette Therriault, Karen Carvell and Joy Fletcher, Program Leads Classifications, Canadian Institute for Health Information

	<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>
	<p>Concrete expected outcome: ICD-10-CA (E&amp;F) is updated in accordance with URC documents and cycles. There are also updates added as required for use in Canada.</p>
	<p>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.</p>
	<p>Source of funding of the activity: CIHI</p>
	<p>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.</p>
	<p>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.</p>

Activity 15:	<p><b>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</b></p>
	<p>Responsible person: Joy Fletcher, Canadian Institute for Health Information</p>
	<p>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-abstracting 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.</p>
	<p>Concrete expected outcome: Improved data quality and valid, comparable data</p>
	<p>Links with WHO activities: Ensures compliance with WHO rules</p>
	<p>Source of funding of the activity: CIHI</p>
	<p>Dissemination of the results: Data mining and re-abstracting 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.</p>
	<p>Time frame of the activity: Triennial releases of updated and new standards with an impact analysis for secondary data users.</p>

Activity 16:	<p><b>Title: To develop educational offerings to reinforce coding standards and data quality throughout Canada.</b></p>
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	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: <b>To facilitate consistent application of ICD-10-CA morbidity coding standards throughout Canada.</b>
	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 12,000 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: <b>Promote the development and use of the ICF in the United States</b>
	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)

	<p>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), and carrying out other related recommendations from the U.S. Consolidated Health Informatics Initiative and the National Committee on Vital and Health Statistics pertaining to establishing ICF as a "CHI-endorsed standard for the functioning and disability domains"; (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) Continue to explore opportunities for linking ICF with the Patient-Reported Outcomes Measurement Information System (PROMIS); (7) As resources permit, consider approaches for validating and expanding work with WHO on developing crosswalks of ICF with major assessment tools,; (8) 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.</p>
	<p>Concrete expected outcomes: (1) ICF Web-Seminar Series held in June 2009; in-person NACC ICF Conference planned for 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; PROMIS researchers presented at the 2007 and 2008 NACC Conferences on ICF. (6) Review IOM report recommendations with U.S. and Canadian colleagues and explore possible North American proposals for updates to ICF.</p>
	<p>Links with WHO activities: NACC representatives can bolster and assist WHO educational and training efforts for ICF and ICF adoption through the activities and instruments mentioned above as outcomes.</p>
	<p>Source of funding of the activity: NCHS, CIHI, Statistics Canada, and other private, academic, non-profit, and governmental organizations, all within fiscal constraints.</p>
	<p>Dissemination of the results: NACC Newsletter, conferences and ICF training activities. .</p>
	<p>Time frame of the activity: Ongoing</p>

<p>Activity 19:</p>	<p>Title: <b>Establish and conduct protocols for disseminating information about North American activities pertaining to the ICF</b></p>
	<p>Responsible person: Dr. John Hough, Statistician, Classifications and Public Health Data Standards Staff (CPHDSS), NCHS, CDC</p>
	<p>Description: Serve as an "information broker" about applications of the ICF in North America. Develop an Annotated Bibliography. Support publication of articles on ICF by North American authors.</p>
	<p>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).</p>
	<p>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. Ensure incorporation in ICF Literature database on WHO-FIC website.</p>
	<p>Source of funding of the activity: NCHS.</p>

	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:	<b>Title: Conduct training and information sessions on understanding and applying the ICF</b>
	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.
	Concrete expected outcome: Focus on ICF training activities, including an educational event in 2009. These activities align well with parallel efforts in the professional sector, including the American Psychological Association's <i>Procedural Manual and Guide for a Standardized Application of the ICF: A Manual for Health Professionals</i>
	Links with WHO activities: NACC continues to be involved directly with WHO team members on web-based ICF training, drawing on the NACC product entitled "Code ICF" and in conjunction with the Functioning and Disability Reference Group.
	Source of funding of the activity: NCHS, CIHI, Statistics Canada, CIRRIE, 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.
	Time frame of the activity: Ongoing activities according to demand and available resources.

Activity 21:	<b>Promote the development and use of the ICF in Canada</b>
	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' Advisory Group in 2009-10 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:	<b>Title: NCHS leadership of International Collaborative Effort (ICE) on Injury Statistics</b>
	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: <a href="http://www.cdc.gov/nchs/injury.htm">http://www.cdc.gov/nchs/injury.htm</a>
	Time frame of the activity: Ongoing

Activity 23:	<b>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</b>
	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 Julie McAuley, 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 two 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:	<b>Title: Participate on IHTSDO Mapping Special Interest Group (SIG).</b>
	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 transition meeting to new International Health Terminology Standards Development Organization (IHTSDO) (2007) and on teleconferences in 2008- 2009..
	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.
	Time frame of the activity: Dr. Berglund's service ended with the transition to the IHTSDO at the May 2007 meeting; however, he continues as a member of the Mapping SIG and TRG.

Activity 25:	<b>Title: Promote development of CAP and NCHS-approved crosswalk between SNOMED and ICD-9-CM and ICD-10-CM</b>
	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:	<b>Title: Active investment and involvement in the mapping activity to map the 8700 SNOMED-CT priority concepts to ICD-10</b>
	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:	<b>Title: Identify educational needs and core curricula for WHO-FIC</b>
	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: <a href="http://www.cdc.gov/nchs/about/otheract/icd9/nacc_ed_committee.htm">http://www.cdc.gov/nchs/about/otheract/icd9/nacc_ed_committee.htm</a> 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 Raleigh, N.C. in April 2009; next mid-year meeting scheduled for April 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: <b>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</b>
	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: <b>Conduct work on at least one related and/or derived member of the WHO-FIC</b>
	Responsible person: NCHS, CIHI, Statistics Canada

	<p>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).</p>
	<p>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.</p>
	<p>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.</p>
	<p>Source of funding of the activity: NCHS, CIHI, Statistics Canada</p>
	<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 Other activities are disseminated in annual reports, papers at conferences and meetings and on websites.</p>
	<p>Time frame of the activity: Ongoing</p>

Activity 31:	<p>Title: <b>Participation in the revision of ICD</b></p>
	<p>Responsible person: NCHS, CIHI, Statistics Canada</p>
	<p>Description: 1) Participate on Revision Steering Group, 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) participated in April 2009 meeting of Revision Steering Group and monthly teleconferences.</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>

