Annual Report of the WHO Collaborating Centre for the Family of International Classifications for the Nordic Countries,
October 2010 – September 2011

Lars Berg, the Nordic Centre for Classifications in Health Care, the Directorate of Health, Oslo, Norway

Abstract

The Nordic Centre for Classifications in Health Care (Nordclass) was established in 1987 as a WHO Collaborating Centre for the International Classification of Diseases (ICD) to represent the Nordic Countries in international activities related to the International Classification of Diseases (ICD).

Since 1995 it has been financed by 4-year grants from the National Health Authorities of the five Nordic countries (Denmark, Finland, Iceland, Norway and Sweden). The centre is an independent body with its own budget and its own board and reporting lines.

From 1993 the Collaborating Centre also assumed responsibility for work with the International Classification of Impairments, Disabilities and Handicaps (now the International Classification of Functioning, Disability and Health (ICF)).

From 2000 the Centre also had the main responsibility for development and update of NordDRG – the Nordic common Casemix system. The creation of a common Nordic surgical classification of procedures (NOMESCO Classification of Surgical Procedures) in 1996 was essential for the DRG as well as a common Nordic use of ICD-10.

The Centre was in January 2009 reorganized and relocated from Uppsala, Sweden to Oslo, Norway. All DRG activities were moved to a new Nordic Casemix Centre established in Helsinki, Finland.

The Nordic Centre was re-designated as a Collaborating Centre until September 2008. The relocation of the Centre to Norway implied a designation as a new Collaborating Centre, not a re-designation. A designation process started early in 2009, but had to be withdrawn in November 2009, because of an unclear situation with lack of support from some of the Nordic Health Authorities.

A letter in December 2010 to the Nordic Health Authorities, with apply for support of the Nordic classification work, was successful. A new designation process could therefore be initiated again in January 2011, with start of the formal WHO designation process in June 2011. This process is now ongoing.

This annual report documents activities from October 2010 to September 2011, as well as the past years, when applicable.
Introduction

The Nordic Centre for Classifications in Health Care was established in 1987 as a WHO Collaborating Centre for the International Classification of Diseases (ICD) to represent the Nordic Countries in international activities related to the International Classification of Diseases (ICD).

The Centre was initiated by the Nordic Medico-Statistical Committee (NOMESCO) and financed and supported by grants from the Nordic Council of Ministries. The Centre was hosted by the University of Uppsala in Sweden, founded and chaired by professor Björn Smedby 1987-2002, and chaired by dr. Martti Virtanen 2003-2008.

Health statistics itself have a long tradition in the Nordic countries. Comparisons of health statistics between the Nordic - but also to some extent the Baltic countries – is the main task of NOMESCO. In 2006 NOMESCO celebrated its 40-year anniversary with two publications:

- Nordic Medico-Statistical Committee (NOMESCO) 1966-2006
  (http://nomesco-da.nom-nos.dk/filer/publikationer/JubiWEB.pdf)
- Health Classifications in the Nordic Countries (about the Nordic Classification
  (http://nomesco-eng.nom-nos.dk/filer/publikationer/KlassifikationshistorieWeb.pdf)

These publications give a detailed picture of both the development of the Nordic health statistics and the Nordic use of classifications, and are available in the typical NOMMESCO style with both English and Scandinavian texts - side by side.

The yearly publication, Health Statistics in the Nordic Countries, summarize and compare the annual Nordic statistics, but also include a theme section and present background tables. Examples on themes are (publication year within brackets): Report on mortality statistics (2010); quality indicators (2009); the Health of the Elderly People (2008); Mental Health (2007); Out-patient care (2006).

Since 1995 the Centre has been financed by 4-year grants from the National Health Authorities of the five Nordic countries (Denmark, Finland, Iceland, Norway and Sweden). The Centre is an independent body with its own budget and its own board and reporting lines. The Head of Centre reports to the Board of the Centre, whose members are appointed by the five Nordic countries national health authorities.

From 1993 the Collaborating Centre also assumed responsibility for work with the International Classification of Impairments, Disabilities and Handicaps (now the International Classification of Functioning, Disability and Health (ICF). From 2000 the Centre also had the main responsibility for development and update of NordDRG – the Nordic common Casemix system. The creation of a common Nordic surgical classification of procedures (NOMESCO Classification of Surgical Procedures) in 1996 was essential for the DRG, as well as a common use of ICD-10.

Due to practical and logistical reasons the Centre had to be reorganized and relocated to Oslo, Norway from January 1st 2009, with Arnt Ole Ree (MD, MPH) as a new Head of Centre. All DRG activities were moved to a new Nordic Casemix Centre established in Helsinki, Finland, with Martti Virtanen as new Chief Executive Officer (CEO).

The Nordic Centre (Nordclass) was re-designated as a Collaborating Centre 2004 until September 2008. The relocation of the Centre to Norway implied a designation as a new Collaborating Centre, not a re-designation. A designation process started early in 2009, but had to be withdrawn in November 2009, because of an unclear situation with lack of support.
from some of the Nordic Authorities.

In January 2010 Lars Berg (MD) replaced Arnt Ole Ree, as the new Head of Centre. Inspired of the WHO-FIC Toronto meeting a letter was sent to the Nordic Health Authorities with apply for support of the Nordic classification work in December 2010. The responses to this letter were successful. A new designations process could be initiated again in January 2011, and WHO could in June 2011 start the formal designation process, which is now ongoing.

The Nordic Centre continues to be active in promoting the development and use of ICD, ICF and other derived or related classification in the Nordic and to some extent also the Baltic countries and in supporting the work of the WHO-FIC Network.

The Centre collaborates with the Classification Departments/Units, the Casemix work and the statistical units/departments in all the Nordic countries, as well as with the Casemix Centre in Helsinki, Finland and with NOMESCO, Copenhagen, Denmark.

Denmark and Sweden were charter members in IHTSDO from 2007. In September 2011 Iceland joined IHTSDO, so three of five Nordic Countries are now involved in the SNOMED CT work, which will have implications also for the Classification work.

The annual reports from the Centre have, during the latest years (of non-designation), only been written in Scandinavian language and intended to the Annual Plenary meetings of NOMESCO. This annual report documents activities from October 2010 to September 2011, as well as the past years, when applicable.

**Title of Center**

Nordic Centre for Classifications in Health Care (Nordclass)

**Annual Report Year**: October 1, 2010 - September 30, 2011

**Address:**
Nordic Centre for Classifications in Health Care (Nordclass)
Department of Financing and Casemix
Division of Health Economy and Financing
Norwegian Directorate of Health
Universitetsgaten 2
P.O. Box 7000 St. Olavs plass
0130 Oslo
Norway
[www.helsedirektoratet.no](http://www.helsedirektoratet.no)
[www.nordclass.org](http://www.nordclass.org)

**Head of the Centre:**
Lars Berg
[lass.berg@primnet.se](mailto:lass.berg@primnet.se)
Phone Lars Berg: +46 734 305 109
Phone administration: +47 810 20 050
Collaboration between the Centre and WHO, Committees and Reference Groups

Co-chairs from the Centre:

- WHO-FIC network (Martti Virtanen) 2008-2009
- MRG (Lars Age Johansson) 2002-2010
- MbRG (Olafr Steinum) 2006-2010

Active participation in WHO-FIC committees and working groups:

- MRG/mTAG: Lars Age Johansson
- MbRG: Olafr Steinum, Gunnar Henriksson, Glen Thorsen, Martti Virtanen
- URC: Olafr Steinum, Martti Virtanen, Lars Age Johansson, Solvejg Bang. The Nordic-Baltic mortality meetings provide feedback to URC/MRG. The Nordic proposals for ICD updates related to mortality and morbidity issues are substantial
- iCamp 2010: Olafr Steinum participated in iCamp1, and Martti Virtanen in iCamp2
- RSG: Martti Virtanen 2008-2009

Nordic representation and work in the harmonization and mapping project WHO-IHTSDO:

- Two Nordic representatives (Kristina Bränd Persson, Lene Vistisen (former Asholm)) in Joint Advisory Group (JAG)
- Nordic active participation in the mapping project SNOMED CT to ICD mapping (Åsa Fernlund, Bengt Kron, Lars Berg)

WHO-FIC network meeting and IHTSDO meeting in Toronto

- The Nordic Centre delegation of 8 persons participated in the network meeting in Toronto October 2010.
- Denmark and Sweden attended the IHTSDO meeting in Toronto October 2010 with twelve participants.

In 2011 the Centre has been represented in the mid-year meetings:

- MRG/mTAG (Lars Age Johansson) in Budapest, Hungary in March 2011
- EIC (Olafr Steinum) in Budapest, Hungary in March 2011
- FDC (Olafr Steinum), in Sydney, Australia in June 2011
- FDRG (Ann-Helene Almborg) in Sydney, Australia in June 2011
- Mapping of items from the Nordic Procedure Classification in 2010 to ICHI (Martti Virtanen)
- Participation in the ICHI workshop Sydney June 2011 (Gunnar Henriksson, Olafr Steinum)
**Major activities 2010-2011**

**Promote the development and use of ICD-10 for mortality statistics in the Nordic and Baltic Countries**

Registrations of causes of death started early in the Nordic countries, but in the beginning it took place without any real coordination between the countries.

The annual report *Health Statistics in the Nordic Countries* (published 2010, with data from 2008) has a theme report about mortality statistics.

ICD-10 is used for mortality statistics in Denmark since 1994, in Finland, Iceland and Norway since 1996 and Sweden 1997.

NOMESCO have one reference group for death statistics production and the Nordic Centre another group for mortality classification and coding issues. The mortality classification reference group was joined by the Baltic Countries in the early 2000s, which became the Baltic-Nordic Mortality Group (BNG). They have regional mortality meetings and cooperation chaired by Lars Age Johansson, on behalf of the Nordic Centre. Coding comparisons have been performed since 2001.

The group contributes in the ICD update process with proposals, comments and support Lars Age Johansson in the MTAG/MRG tasks. Lars Age Johansson is also involved in the mortality rules for WHO-FIC and ICD-11, in the automated coding of causes of death (ICE) and the IRIS project and in the European collaboration in death statistics (EUROSTAT).

Reports from the countries (Latvia has no report):

**Denmark:** Over the last few years there have been several reorganisations and budget cuts. The electronic certification has been very successful and 95% of certificates are now submitted electronically. A new web-based version of the electronic death certificate is being developed, and the new version will be quicker and easier to maintain. Some problems still remain to be solved, but it is hoped that the new certificate will be put to use in early 2012. However, a new solution is required for the electronic signature.

The statistics are now published regularly in December of the year following the data year. About 3000 certificates are missing each year. Recent trends include a slight drop in cancer, in spite of better diagnostics. There is a rise in dementia, but now a clear diagnosis of dementia is required for some types of health care and community assistance. There is also an increase in alcoholism.

**Estonia:** A new software has been developed for all registries in the Institute for Health Development. The aim is to facilitate linkage, centralize management of numerous common classifications.

A project to link data on fatal poisonings 2000-2009 with Estonian Forensic Institute is completed.

Individual data are provided to the Estonian Cancer registry, which has been impossible for a number of years because of legal constrains.

Statistics did not change much, there was sharp increase of drownings in 2010 because of extremely hot summer, overall mortality is on decline and life expectancy is growing.

**Finland:** Work on the 2010 certificates is in progress and the data will be released by 16 December 2011. Currently about 800 certificates are still missing, but Statistics Finland does not accept more than 150 missing certificates in the final register. Missing certificates are traced by regional offices of the Institute of Health and Welfare.
Statistics Finland has now published causes of death for 75 years, and the occasion will be marked by a special publication and a seminar. Automated coding might be used for routine cases. An electronic certificate is planned for by 2016 and a pilot project will start next year.

Dementia is increasing, even after age standardisation, and this might be a result of competing causes of death. The level of alcohol deaths is high, especially in middle-aged people, although alcohol taxes are now higher than they used to be. In all probability the data are reliable, since autopsy rates are high.

Iceland: Mortality coding for the data year 2009 was done with unchanged methodology and published autumn 2010. At that time Statistics Iceland was responsible for coding and publishing of the data. During the year 2010 a change of legislation was proposed, moving the mortality coding from Statistics Iceland to the Directorate of Health. A law was passed and from May 1st 2011 all responsibilities of mortality coding were transferred to the Directorate of Health. The practicalities of the transfer are still not finished but it is foreseen that publication of mortality coding results for the data year 2010 will be postponed, probably until mid year 2012.

The Icelandic coding team will hopefully start participating in the coding exercises again later this year. No further official decisions have been issued on changes in the mortality coding but there is interest in reviewing possibilities of an electronic death certificate in the near future.

Lithuania: The Institute of Hygiene is now responsible for the mortality statistics, and a new mortality register has been created. The 2010 data were published in August, in Lithuanian and English. The publication includes both underlying cause and multiple causes. Data on non-residents are collected but not published.

Coding is still manual, although some preparations for automated coding have been made. However, no decision has been made yet on when to switch to automated coding. Currently there are no plans for electronic certification. The Australian clinical modification of ICD-10 is now used in Lithuania for morbidity.

Norway: The 2010 data will be published by the end of September 2011. Ongoing development work includes introduction of the Iris system and an electronic death certificate (possibly by 2012). A revised, and more user-friendly, mortality yearbook is also under development. During the last year, many resources have been consumed by a general encryption requirement that applies to all medical registers.

Dementia is increasing, especially for women, and there is an increase in COPD as well. About 20% die at home. In 2010 there were some “new flue” deaths at younger ages, mainly in people with a serious chronic disease. 1-2% of death certificates are missing at the time of publication.

Sweden: The backlog created by the implementation of ICD-10 and the relocation of the statistics to the Board of Health has now been cleared, and the 2010 statistics were published in July 2011. Speeding up the statistics required some sacrifices in quality, however, and there were fewer queries and checks for the 2010 data than before. This can be seen in the 2010 statistics, where above all the unspecified causes of death have increased.

Sweden is developing a new production system for mortality statistics which, according to current plans, will be introduced in October. At the same time, the Iris coding system will be introduced. An electronic death certificate is available since last year, but it is not much used. Work on developing a module for use in electronic health record systems is in progress.

Most prominent recent trends: Decreasing neoplasms and transport accidents, increasing COPD for women and dementia (especially for women but also for men).
Promote the development and use of ICD-10 for morbidity statistics in the Nordic countries

The Nordic Countries have good opportunities to perform register-based research and statistics because of the unique personal identification number available to all persons with permanent residence in the Nordic countries. This number makes it possible to link information at the individual level from several registers.

There are National Patient registers in all the Nordic Countries, for both in-patient as well as out-patient care. ICD 10 was introduced for the hospital statistics in 1994 in Denmark, 1996 in Finland, 1997 in Iceland and Sweden and 1999 in Norway. The General Practitioners in Norway use ICPC-2 compulsory for health care visits. ICPC or ICD-10 is used to a certain extent in Denmark, Iceland and Finland by the GPs. Sweden uses an adaptation of ICD-10 for Primary Care since 1998.

Almost 100 percent of the GPs and 80-100 percent of the hospitals use Electronic Health Records (EHR). ATC codes are used in the EHRs for specific coding of adverse reactions and intoxications as optional codes to ICD-10 codes, or optional codes for administration of medications in the procedure classifications.

The Nordic Reference Group for Classifications has their focus mainly on morbidity coding of procedures and diagnoses. A workshop took place in Copenhagen 21-22 September 2011. The intentions are that the workshop will be a start for a Nordic Morbidity Reference Group, which can support the Nordic morbidity experts in the updating process for ICD-10 and in the coming ICD-11 revision process.

The participation in the MbTAG/MbRG has been less during this working period, as the Centre has not been a designated, but Olafr Steinum have been able to follow the process through personal contacts.

Promote the development and use of ICF in the Nordic countries

ICF in full and short versions are translated to Danish and Swedish (2003), Norwegian and Finnish languages (2004). Iceland has a preliminary version translated.

ICF-CY is translated to Swedish och Norwegian languages, and published 2010. Denmark will finish their translation and publication soon.

ICD and ICF-CY are used in research (several Theses) and as a conceptual framework for functioning and disability in relation to health. The clinical use in health care is so far limited to specific use as core sets, sick-leave information and DRG for rehabilitation. There is a growing interest from the Social Service.

Ongoing projects in Sweden are very much focusing on ICF and ICF-CY as part of a common language in Social Services.

The Nordic representative Solveig Bang has been active in the international work by FDRG/f-TAG and in the update process in the Update Reference Committee (URC). Ann-Helene Almborg participated in the FDRG meeting in Sydney June 2011.
Contribution to the work on the International Classification of Health Interventions (ICHI) and the Family Development Committee (FDC)

The Nordic countries, with exception for Iceland, use their own translation of the English version of NOMESCO Classification of Surgical Procedures (NCSP). Estonia is using the English version for statistics and DRG. The non surgical procedures are national Nordic Classifications, but are mapped to NCSP format and included in “NCSP-plus”, which is a cross map for mainly DRG use. Iceland uses the English version of NCSP-plus in their EHRs.

National procedure classification and ICHI
In 2010 the ICHI working group populated the ICHI content model with items from ten different internationally used procedure classifications. This mapping process included NCSP, with the work performed by Martti Virtanen. Gunnar Henriksson, and partly Olafr Steinum, participated in the ICHI workshop in Sydney, Australia in June 2011.

Relation procedure classification to SNOMED CT
In a special project in Sweden all non surgical concepts in the national procedure classification was mapped to SNOMED CT. Of the 2157 mapped classification concepts 42 percent were 1-to-1 mapping. In 25 percent there were inconsistencies between the two systems. In 33 percent no mapping was possible.

Relation procedure classification to ICF
The non-surgical procedure classification in Sweden lacks items to describe interventions relevant for rehabilitation, nursing care and procedures suitable for occupational therapists, physiotherapists or nurses. Within a national project, resources were allocated to develop a national, multi-professional classification of interventions using the ICF structure. Multi-professional focus-groups with experts with knowledge about ICF and methods for classifications contributed.

Practical tests during 2006, together with the professionals’ reviews contributed to the final version. The result was a national, multi-professional classification of 372 interventions using the ICF structure at two levels (1st and 2nd) and the components Body Functions, Activities and Participation and Environmental Factors.

In January 2008, the interventions, using the ICF structure, were included as a specific part of the Swedish non-surgical procedure classification. According to a Swedish national register, two thirds of these interventions have been used in in-patient care in 2009. In a mapping exercise, one third of the concepts could not be found in SNOMED CT.

Contribution to the work in the Education and Implementation Committee (EIC)
ICD-10 is translated and implemented for mortality and morbidity in all Nordic countries since 14-16 years. ICF is fully translated, with exception for Iceland. ICF-CY is translated and published in Norway and Sweden, and on its way in Denmark.

Education for ICF and ICF is performed in different ways in the Nordic countries. Norway has prepared a web based training module for ICF-10 (in Norwegian language), but available for translation and use also for the other Nordic countries. In Sweden the training is performed by
mainly a private company. Our Nordic experts Olafr Steinum and Gunnar Henriksson have been heavily involved in training of doctors and coders in Sweden and also Norway.

Olafr Steinum participated in the mid-year meeting in Budapest, and presented the education concept and results.

**Contribution to the work related to the Informatics and Terminology Committee (ITC)**

Denmark, Sweden and – since September 2011 – Iceland are members of the International Health Terminology Standards Organization (IHTSDO). Denmark and Sweden have translated versions of SNOMED CT.

Kristina Bränd Persson is a member of the Joint Advisory Group (JAG) between WHO and IHTSDO. Denmark (Lene Vistisen (former Asholm)) and Sweden (Kristina Bränd Persson) are standing members of the IHTSDO Management Board.

Three out of four standing committees have Danish or Swedish members. Lene Asholm, Denmark, is chair of the Content Committee; Daniel Karlsson, Sweden, is a member of the Quality Committee; Mikael Nyström, Sweden, is a member of the Technical Committee.

Several of the Special Interest Groups (SIG) and working groups (WG) have participants form Denmark or Sweden.

Sweden is involved in the IHTSDO Specialist Interest Group for mapping (MapSIG) and the Working Group for mapping between ICD-10 and SNOMED CT. Sweden has contributed with a volunteer in the ongoing Phase 1 mapping project.

The IHTSDO International Family Practice/General Practice SIG (IFP/GP-SIG) is working with a reference set for primary care and a mapping SNOMED CT to ICPC. Sweden (Roland Morgell, Lars Berg) and Denmark (Eric Falkoe) participate in this work.