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ICPC and Personal Risk Factors

The ICPC (International Classification of Primary Care) is a classification for general practice and primary care, developed and managed by the World Organization of Family Doctors (Wonca).

ICPC has been implemented in many countries. In the Netherlands, ICPC is the standard for coding and classification of complaints, symptoms and disorders in general practice. The ICPC structure is bi-axial: the first axis consists of 16 chapters relating to body systems and one chapter on social and societal problems, and the second axis consists of components, by which diagnosis, including symptoms, diagnostic and therapeutic interventions and other aspects of the disease episode are recorded. In this respect, ICPC distinguishes itself from other international disease classifications.

General practitioners in the Netherlands use the first version published in 1986, ICPC-1. The Dutch GPs College (NHG) releases the Dutch translation. More than 90% of Dutch GPs are coding the diagnosis with ICPC-1 which forms an integral part of all authorized electronic patient records (EPR) in general practice. ICPC coding allows the use of important support systems such as the standards of the NHG and the GVS (drugs prescription module) in the EPR and has an important role in daily patient care.

ICPC-2

Since 1998, there is already a second version of ICPC, the ICPC-2. However, the current ICPC-1 will not be substituted by ICPC-2 in the short-term. The differences with ICPC-1 are relatively small in main titles and subdivisions. ICPC-2 has the advantage that it is linked to ICD-10, that will be used in Dutch hospitals. With the newly designed thesaurus that both classification systems mutually link, the exchange of information between family physician and specialist may improve. In the last 10-20 years, general practice progressed in developing an EPR. Patient files in Dutch general practices are now (almost) entirely electronically. The central role of ICPC in the EPR allows to utilize the computer more efficiently. The standard encoding of illness episodes with ICPC enables to surveil groups of patients, supports the process of prescription and the use of NHG Standards in the EPR. The ICPC structure is also important for the online communication with laboratories. At present, information systems include options for encoding diseases and disorders, complaints and procedures. ICPC is the link by which GPs exchange the data in reliably manner for the out of hour's consultation by means of the National Switch Point (LSP).

New developments

Wonca, in close consultation with WHO and IHTSDO, is currently working on a revision of ICPC (ICPC-3) to establish a strong cohesion of ICPC-3 with ICD-11 and SNOMED.

Editorial Board

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A classification of personal risk factors will be a necessary tool to structure preventive activities by which individual prevention effectively can be broadened. It will provide a common and social framework for close collaboration between professionals within and between professional fields.

Prevention

A major challenge for the Dutch public health is to reduce the disease burden of chronic diseases in the population. Influencing the lifestyle of the population is a major key. The health ministry has prioritised obesity, smoking, excessive alcohol consumption, diabetes mellitus and depression.

To successfully address these problems, the coherence between the domains of individual and collective primary medicine and public health (public health and primary health) needs to be improved. After all, change in lifestyle requires an individual-oriented intervention (first line medicine), but has only impact on the health of the population at large if the individually targeted interventions are systematic and embedded in collective actions (Public Health). The detection of high risk groups and individuals requires consistency in the identification, capture and share of personal risk factors. At this moment, there is no classification of personal risk factors within ICPC, which is a barrier for systematic prevention. The development of a registration of personal risk factors fits in the revision of ICPC.

If a classification would be available, computer programs could support prevention activities, such as the annual flu vaccination, which at the moment is done on basis of one ICPC category.

Personal risk factors as part of ICPC

Currently we have made a proposal to design a classification of personal risk factors in relation with the ICPC (ICD and IHTSDO) that can be used for the implementation and exchange of various preventive activities in the first line and that fits in the EPR in general

practice by which the implementation is certified.

The development of this classification can play a role in various projects which will soon start. Example projects will be prevention consultation, first-line renewal, diabetes, obesity, exercise and healthy diet, the frail elderly. The new classification can be linked to guidelines, prescription guidelines, background documentation, outcome indicators and patient information. As a tool this classification of personal risk factors might also be used for many other questions that focus on prevention. It is a generic instrument that by the anchorage in the EPR has a great implement ability.

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Editorial

In a few weeks the WHO-FIC Network is going to meet for its annual meeting in Seoul Korea. Special attention will be paid to classifications and primary care. For this reason we included in this newsletter as the opening article a contribution prepared by Kees van Boven, Chris van Weel, Wil van den Bosch and Huib ten Napel (Primary Care Department University Medical Centre Nijmegen) concerning ICPC and personal risk factors.

Of course we pay attention to other family members in this newsletter. First of all the oldest member of the family the ICD: a new electronic ICD-10 training tool developed by the WHO-FIC Education Committee and the announcement of the ICD-10 2008 edition (see leaflet and order form enclosed). The ICECI as a related family member is taken into account within the revision (ICD-11); depending on the result the responsible ICECI group has to consider how to proceed with the ICECI as such. An other related member is the ICNP; the release of version 2 is being announced in this newsletter; we congratulate the group behind the ICNP but are still waiting for more

information regarding the exact relationship between the ICNP and other members of the WHO-FIC.

As in real life, children are asking the attention of everyone: the ICF as the second youngest member of the family enjoys a lot of attention in the world and so in this newsletter. The co-chairs of the Functioning and Disability Reference Group (FDRG), Ros Madden and Gerold Stüicki, were so kind to update the readers about developments around ICF issues including the planned updating process open to everybody in the world. Margie Schneider contributed information concerning the work of the UN Washington Group on disability statistics; a short and an extended question set being developed; the next step will be to develop questions regarding environmental factors. We received reports from Belgium, Germany and the Netherlands regarding ongoing or planned ICF activities. And of course we include our ICF reference update.

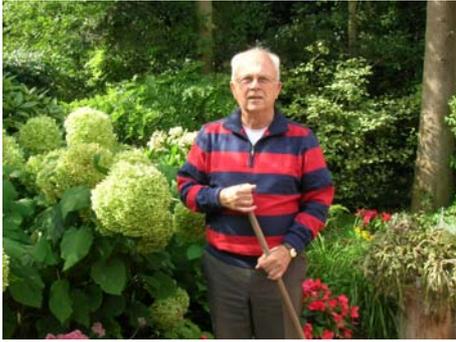
A short piece of information is included concerning the ISO9999 and its responsible ISO group. Because of a WHO project a mapping exercise has been carried out from diseases, through ICF-classes to ISO9999 (sub) classes. Who else in the world has the same kind of experience?

A missing member in this number is the ICF-CY. Unless a lot of interest we did not receive contributions concerning the 'baby' of the family. We invite readers to send us their experiences in using the ICF-CY for publication in the next number.

Dutch Centre news:

- After several months of hard working in preparing our workplan 2009-2012 for WHO we think our redesignation is nearby!?
- Willem Hirs, former centre head, is still going strong; after his retirement he was in charge with updating our website and preparing the newsletter twice a year; deo volente he will celebrate his 70th birthday by the 1st of October 2009; he will step back a little bit but hopefully we can still

make use of his expertise in 2010 in one way or another.



1 October Willem Hirs 70

International Organizations

World Health Organization

WHO-FIC Network Meeting

10-16 October 2009



The 2009 Annual meeting of the WHO Network of Collaborating Centres for the Family of International Classifications will be held at the International Convention Center of the Catholic University of Korea at the Songsim Campus in Yeongok Dong/Bucheon, (Seoul metropolitan area), the Republic of Korea. The meeting will be hosted by the Korean WHO Collaborating Centre for the Family of International Classifications (currently in process of designation) based at the Korean Ministry of Health, Welfare and Family Affairs.

Primary care classification and terminology and its implications for the WHOFIC will especially be subject under discussion in the

conference on Friday morning the 16th of October. "Primary Care Classification, in memory of Henk Lamberts" and "ICD & ICF" have been identified as the main themes for the poster sessions by the WHO-FIC Council.

All documents, posters and meeting reports are published on the website, <http://www.who.int/classifications/network/meeting2009/en/index.html>.

For information on this column:

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The new electronic WHO ICD-10 training tool

New electronic ICD-10-training improves implementation of ICD, a building block of useful health information. Trainees will enjoy ICD training more than ever.

Data on causes of death and illness that are coded with the International Classification of Diseases are important elements of useful health information, at national and international levels. Training on how to use and how to understand the ICD has always been a bottleneck to the implementation and proper use of the classification. In the past, some electronic training methods have been produced, but recent progress in technology, updated experiences in training, and changes to the classification have encouraged the creation of a new tool.

The outline of the new electronic ICD-10 training is based on curricula that result from 17 years' practical experience in training for ICD-10 in the WHO Network for the Family of International Classifications (WHO-FIC). Familiarity with previous software, such as Tendon, and some national tools allowed further enhancement to the content and structure of the training.

The range of target audiences for the training is independent of the different

uses of ICD, and of country or stage of implementation. The modular tailoring of the different elements of the training allows different user groups to be guided through their training on individual paths specific to their needs, or users can select to undertake the full training package.

The full training package includes 28 sections taking a total of approximately 40 hours' training time. Coders undertaking the full training will interactively learn about classification context, how to use ICD-10 for morbidity and mortality coding, pitfalls in coding and analysis specific to individual chapters, basic medical science, statistical presentation of coded data, confidentiality and certification of causes of death.

The basic introductory materials on how to code and how to avoid major errors in coding require approximately two hours' training time.

The materials for trainees to understand the correct use of the international medical certificate of cause of death take about 30 minutes to complete.

A basic overview of the coding process and the ICD for managers, epidemiologists, or others who will not need to code but require an understanding of the process, can be gathered by completing the introductory section of the tool and working through chapter summaries, an overall duration of about 5 hours.

Training is needed in places with and without Internet connection; the tool runs online, as well as in standalone mode. A storyboard version will facilitate creation of a print edition if this is necessary. Low bandwidth and low computing power should not hamper use. This training tool requires only a plain Internet browser. It contains neither complex animations nor any other sophisticated features.

Translatability of training materials is a relevant aspect to implementation. The authoring tool facilitates translation as it allows exporting of tagged text that can be translated and imported back into the tool. Translating spoken text is

very expensive, and therefore the tool does not include this technology.

Examples, exercises, graphics and interactivity make the tool appealing and encourage trainees to maintain their interest. This kind of training tool will make learning ICD fun.

A draft has been tested online. Extensive feedback is now informing the last edits to the tool and it will become available in 3rd quarter 2009.

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ICF and FDRG activities

In 2006 the WHO Family of International Classifications (WHO-FIC) Network established the Functioning and Disability Reference Group (FDRG) to advise it on functioning, disability and health classification and coding issues. The FDRG has developed a work program to enable it to provide well researched advice.

The motivations for this work program include:

- The need to educate people and potential users about the ICF
- The need to reflect on ICF implementation – useful applications, new ideas and commentary, challenges, gathering new knowledge gained from experience with its use
- The need to develop useful tools to make ICF use easy and relevant
- The need to update the ICF in the light of experience

The FDRG now has about 30 members worldwide, including people from various disciplines and organisations. Disabled people's organisations (DPO)

and an even broader collaborative network are involved in its work.

The following eight task groups have been established to carry out a collaborative work program.

Coding guidelines

The coding guidelines in annex 2 of the ICF are being enhanced for specific applications of the classification (in particular for case-based data collection and population-based collection). Literature on the current use of the classification shape the guidelines, as does close collaboration with the other task groups.

Updates

An electronic platform for updating the ICF and an update process are being developed. The platform will be open to submissions from any users of the classification and should be operational in 2009-2010.

ICD and ICF

The International Classification of Diseases (ICD-10) contains language that is inconsistent with the ICF. The FDRG is using the opportunity of the current revision of the ICD to promote harmonisation between the two classifications, so that they can be used together in the complementary manner intended by the WHO.

Measurement

This task group works as a 'collaborative forum' to discuss the work of members. Members' projects include: work on ICF Core Sets or short lists of ICF items for use with specific health conditions; ICF-based measurement and management in the field of education; mapping the relationships between existing assessment measures.

Education materials

A set of curriculum modules has been developed, upon which courses, lectures, workshops, courses of study can be built. Also being developed is a new ICF overview to introduce new users to the ICF and an ICF web-based education tool.

ICF: ethics and human rights

The guidelines in ICF annex 6 are being enhanced in light of the UN Convention on the Rights of Persons with Disabilities (UN 2006). Other major activities of members include publishing a paper 'Relating ICF to UN Convention for Monitoring', and organising the International Conference on Disability, Justice and Long-term Care, Milan 2009.

Environmental factors

Three areas of work are under way:

- A paper on different approaches to measurement.
- Gaps in content of the ICF Environmental Factors component are being considered. For instance, the ICF-CY changes to Environment identify content gaps that can be fed into the ICF update process.
- The relationship between the ICF and the ISO9999 (a classification of assistive devices) is being investigated, to bring them into better alignment through the revision of the ISO9999 and the ICF update process.

Terminologies and ICF

With growing interest in electronic health records it is important that functioning and disability be represented accurately, reflecting ICF terminology rather than older models of disability. Work is underway to examine ICF terms in existing terminologies and to create an ontology to ensure that functional status information is machine readable.

The FDRG attempts to meet twice per year, and scheduled its 2009 mid-year meeting to coincide with the meeting of the ICF Latin American and Caribbean Network in July in Sao Paulo, Brazil. Detailed discussions of the FDRG work program took place. Of special interest was the half day of presentations from people in the region. The use of ICF and ICF Core Sets in clinical care is being widely adopted. In a number of these countries the ICF now underpins the social security or disability registration system.

For information:

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ICECI and ICD-11

Users of the ICECI might be very interested in the way how the ICECI plays a role in the revision of ICD-10 into the ICD-11. For this reason we looked and found some relevant information which is reflected below.

The ICECI is very much 'on the table' for the ICD-11 revision. Version 1.2 has been loaded into the ICD10+ Collaborative Revision Platform, along with other classifications that are seen as sources. Throughout the process to date, there has been a tacit expectation that ICECI will influence the revision of the External Causes chapter of ICD. It has been less clear exactly what this will entail. The most fundamental difference between ICECI and the ICD-10 external causes chapter is the greater pre-coordination of the latter. Hence, meaningful influence of ICECI on the revision will almost certainly involve some movement away from pre-coordination. But what sort, how much and how can this be done without damaging the potential for external causes data coded to ICD-11 to be back-mapped to ICD-10, at least for important categories?

A process capable of achieving that is coming into focus, now that the technical basis for the revision has become pretty clear. In essence, the current ICECI (v1.2) and the current Chapter 20 (in ICD-10 and in the clinical modifications) are the main starting points. ICECI is treated as an expression of a conceptual model for external causes coding. Mapping is done between ICECI and ICD. Both will change during this process, for

two main reasons: (1) the introduction of changes needed to improve the external causes classification at a detailed level (e.g. refining scope of a category, adding definitions, inclusion terms, etc) and (2) to resolve, as far as feasible, structural mismatches.

The result will be an ICD-11 database (that is the form that the basic repository of the classification will have) which includes external causes classified in a way similar to the current version of the ICECI, but enhanced in the course of that process (we could regard the result as being ICECI v2). Embedded in the database will also be information about relationships between entries, which will allow production from it of at least one, and perhaps more than one, 'smaller' version of the External Causes classification, for use as part of particular 'ICD-11 use cases'. There will certainly be one of these reduced forms for mortality coding. There must also be one suitable for coding hospital inpatient cases; whether this must be different from the mortality one is not yet clear to me (i.e. the case for distinct morbidity and mortality versions is strong for diagnoses, but less obvious for external causes). I hope that there will also be one suitable for use in settings in which coding is not done by professional coders. Note that the projected versions of ICD-11 for (at least) the main 'use cases' (mortality and morbidity) will be available in formats very similar to ICD-10 (i.e. printed books, as well as electronic formats).

The result of this could well be that ICD-11 (as a full system) incorporates the whole of a revised ICECI ('Version 2'), with well-defined relationships between that 'full' version and the reduced versions 'projected' from the database for particular purposes (mortality, etc).

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Mapping diseases, ICF-classes and ISO 9999 (sub)classes

The Priority Medical Devices Project (PMDP) is a project of WHO. Information on this project can be found on http://www.who.int/medical_devices/access/en/.

The goal of the project is '*To identify gaps in the preventive, diagnostic, therapeutic and assistive medical devices available on the market which would constitute priorities to be addressed because of the associated disease or disability burden.*'

The goal of the subproject '*Selection of assistive products for high burden diseases: Mapping diseases, ICF-classes and ISO 9999 (sub) classes*', was to make an inventory of the assistive products needed by persons having these diseases. The 15 diseases with the highest burden are: tuberculosis; HIV/AIDS; diarrhoeal diseases; malaria; lower respiratory infections; low birthweight, birth asphyxia and birth trauma; malignant neoplasms; diabetes mellitus; unipolar depressive disorders; cataracts; hearing loss, adult onset; ischaemic heart diseases; cerebrovascular diseases; chronic obstructive pulmonary diseases; and road traffic accidents. These diseases were mapped to assistive products using the ISO 9999 (Assistive products for persons with disability – Classification and terminology). Many, but not all of the assistive products are assistive medical devices.

To give an overview of assistive products (in the form of spreadsheets) relevant for people who suffer from a high burden disease, a two-step procedure was used:

1) *linking diseases to problems in functioning.*

In this step diseases were linked to ICF-codes, representing problems in functioning of patients with the disease. When available ICF core sets were used for this linking process. An ICF core set is a selection of classes from the ICF, representing relevant aspects in the functioning of patients with that

specific disease or health problem (www.icf-research-branch.org). For five of the 15 diseases a general ICF core set is available. For malignant neoplasms core sets are available only for breast cancer and for head and neck cancer. When there was no core set available, ICF-codes were selected by consultation of two or more international experts in the field of the disease or by making a selection of relevant ICF-classes based on existing guidelines and literature references.

2) *linking problems in functioning to assistive products.*

In this step ICF-codes were linked to subclasses of the ISO 9999. This linking was based on a report published earlier on the website of the WHO Collaborating Centre for the FIC in the Netherlands (www.rivm.nl/whofic/in/ISO9999withICFReferences.pdf). In this report all subclasses of ISO 9999 are mapped to relevant ICF-classes based on the intended use of the products.

The results of the subproject will be published by the WHO.

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International Council of Nurses

ICNP® Version 2

The International Council of Nurses (ICN) released Version 2 of the International Classification for Nursing Practice (ICNP®) at the recent ICN 24th Quadrennial Congress in Durban, South Africa.

The ICN is a federation of 133 national nurses' associations representing the millions of nurses worldwide. Operated by nurses for nurses since 1899, ICN is the international voice of

nursing and works to ensure quality care for all and sound health policies globally.

ICNP® is an international standard for nursing terminology and an integral part of the global information infrastructure informing health care practice and policy to improve patient care worldwide. Version 2 includes more than 400 new concepts.

“Version 2 enhances efforts to describe and compare nursing across countries, cultures and languages,” said David Benton, ICN's chief executive officer.

“The ICNP® tool facilitates the visibility of nurses, supports the examination of nursing practice worldwide, and streamlines comparison of nursing at the international level. Data-based nursing knowledge will help improve decision-making for outcomes-driven nursing interventions, health care resource management, and nursing and health care policy development.”

ICNP® Version 2 is available electronically, see www.icn.ch/icnp.htm to download files with the new version. A new web-based collaborative ICNP® workspace, ICNP® C-Space, is also available at <http://icnp.clinicaltemplates.org/info/v2/>. C-Space provides a tool set for ongoing development and distribution of the ICNP®. Additionally, the ICNP® Browser and Translation (BaT) Tool is available to assist with distributed work by translation teams via the Internet. Work is progressing to ensure re-use of previous translation work and assist translators with updating changes between versions. A monograph, entitled ICNP® Version 2, about the history and current state of ICNP is available at the ICN Bookshop, see www.icn.ch/bookshop.htm.

The launch of the new version, was a landmark event for the International Council of Nurses (ICN) and represents the work of countless nurses and experts worldwide. ICN welcomes input and ideas for ongoing

development and improvement of ICNP®.

Anyone who intends to work with ICNP® in any capacity must sign a Use Agreement with the ICNP® Programme, see www.icn.ch/icnp_permission.htm for further information on using ICNP®.

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International Organization for Standardization

Work in progress for ISO 9999: 2011

The ISO 9999 is a related member of the WHO family of international classifications (WHO-FIC). In ISO 9999, *Assistive products for persons with disability - Classification and terminology*, assistive products are classified according to their function. The present version is ISO 9999: 2007.

The development of ISO 9999: 2011 has started with the registration as an approved new work item in May 2008. In the Helsinki-meeting in November 2008 it was decided by ISO/TC173/SC2 (Subcommittee 2, *Classification and terminology of the Technical Committee 173 Assistive products for persons with disability*) to publish the Committee Draft in June 2009. At the end of June 2009 the document was circulated under all members of ISO/TC 173 *Assistive products for persons with disability*. The national bodies will have three months to study the text and to submit comments. The comments will be discussed during the November meeting in Metz. The DIS publication of ISO 9999: 2011 is planned in January 2010.

WG11, responsible for the revision, is convinced that harmonization of terminology between ICF and ISO 9999 is important. Several issues related to this harmonization were discussed during the Delft meeting in April 2009. Due to uncertainty about

the exact meaning of some terms in ICF (such as ‘mobility’, ‘training, learning and education’, and the use of ‘disability’ versus ‘disabilities’) a letter was sent to WHO for clarification. As assistive products are part of chapter 1 of the list of environmental factors of ICF, WG11 has sent WHO an invitation for a representative of FDRG7, (environmental factors), to join the next meeting of WG11.

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United Nations

The Washington Group on disability statistics: Short and extended question sets

The Washington Group on Disability Statistics (WG), a UN Statistical Commission city group, met for the first time in February 2002 in Washington DC. The goals set were to develop internationally comparable measures of disability starting with a Short Set for use on Censuses and followed by a series of extended sets for use in surveys. This piece presents a brief overview of the developments to date. Further information is available from <http://www.cdc.gov/nchs/about/otheract/citygroup>.

The Short Set consists of 6 questions – one per domain – and aims to identify the population at risk for experiencing the disadvantage associated with difficulties in these 6 core functional domains: seeing, hearing, walking/climbing, cognition, self care and communication. The Short Set was developed using a process of cognitive testing in about 16 countries using an innovative approach that built on standard cognitive testing methods by incorporating a standard test procedure. The results of the cognitive testing were discussed at the 6th WG meeting in Kampala, Uganda, in 2006. The outcome of the overall analysis was a revision of the communication question. In addition, it was recognized that asking about difficulty

seeing ‘even when wearing glasses’ in a single question was challenging especially when contrasting developed versus developing countries responses to this question. The Short Set was further tested in the joint WHO/UNESCAP project undertaken in 2005/2006 where various question sets were compared, including the Short Set. The use of the Short Set is only part of the disability measurement in censuses. The identification of the population at risk requires further analysis comparing the population with difficulties to the population without difficulties on a range of factors such as employment, educational attainment, social participation and access to services to determine the outcomes associated with being disabled.

The next goal of the WG is to develop a series of extended sets that will not only identify a more comprehensive population at risk (e.g. by adding domains of affect, learning, pain and fatigue) but also provide more extensive information about each of the domains and adding. Work on question sets to obtain information on more complex domains such as education, employment and social interactions and on environmental factors is also planned. The WG developed a matrix that encapsulates the different types of domains to be covered and the measurement of capacity and performance for these different domains.

The first of these extended sets have been developed through a process that has included both cognitive and field testing. Much of this work has been a joint collaboration between the WG and the project from ESCAP on improving disability measurement and statistics in the Asia Pacific region. In February a training workshop was held in Bangkok where two representatives from each of the seven ESCAP project countries were trained in doing cognitive test interviews using the initial extended sets module developed from the discussions in Manila at the 8th WG meeting in October 2008. The seven countries were Philippines,

Cambodia, Mongolia, Sri Lanka, Maldives, Kazakhstan and Fiji. The training was carried out by Kristen Miller and Stephanie Willson from the NCHS.

The countries then undertook twenty cognitive interviews each, as did a number of others in the team from Canada, USA, South African, and Australia. These interviews were analysed and discussed at a workshop at the NCHS in Washington DC in May 2009. Out of this workshop the field test questionnaire was developed. The test questionnaire also incorporates a number of probes to test out different reasons for people’s responses.

This field test questionnaire has now been used in three of the ESCAP project countries and is in the process of being used in the remaining four countries. Each country is interviewing a sample of 1000 respondents in a mix of rural and urban areas. Each country had a week of training provided by Ken Black, Andres Montes and/or Margie Schneider. This training was for the enumerators and preceded the start of the data collection.

The results from the cognitive tests and from the first three field test countries should be available for an initial analysis and presentation at the WG meeting in Dar es Salaam, Tanzania, 7 - 9 October 2009. The main focus of the 9th WG meeting will be on the cognitive testing process and analysis.

The next step in the work of the WG extended sets workgroup is to develop questions on environmental factors.

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for the WG and specifically the Extended Sets workgroup.

FIC around the World

Belgium

Developments on ICF in Belgium

In Belgium there is an increasing demand and need to implement and apply the 'ICF' in daily practice for different areas of health (at the academic, governmental, educational and clinical level). Until so far there's little coordination and fine-tuning of the different ICF-related projects. Belgium is in need of clear guidelines and strategies concerning the use of the classifications and the underlying vision or theory. There is also the challenge of finding a funding for such projects.

Therefore a number of people, working in different areas of health and interested in applying the ICF in their area, developed the idea to work together for the creation of a National platform. A well organized platform is thought of to be able to fulfill a coordinating role. For reasons of acceptance of this central role it's important that the different health and social areas are represented in this platform. It is aimed to represent the different disciplines that are to be involved in ICF-development, such as general practitioners, nurses, physiotherapists, occupational therapists, social assistants, occupational physicians, etc... In the nearby future we will search and involve persons with experience concerning the ICF to guide this platform. This is the right way to make sure that the platform leads to a harmonized process of implementing the ICF in Belgium. The platform will be the starting point for different studies, policy advices and proposals for the implementation of the ICF in the curriculum of students in the health care area. A special area of attention is the uniform and structural anchorage of the ICF in the concept of e-health. Consequently, the implementation of the ICF adds to the growing need to digitize health care. The platform will

encourage the implementation of ICF on different levels: as a universal language, as a framework and also as a terminology for the description of human functioning on which instruments should be based and developed. Communication and cooperation with the government is an essential aspect to establish and support the platform.

We are aware that the development of such a platform cannot evolve in isolation but needs to be in cooperation with the World Health Organization (represented by the Collaborating Centres). We are therefore planning further conferences on the ICF and guidance by the Dutch and French Collaborating Centres. There will be communication about the ongoing projects through the newsletters of the Dutch Collaborating Centre. We are looking forward to report on the progress we will make.

To be continued!

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Germany

Germany issues a recommendation for the use of the ICF in vocational rehabilitation

Since 2001 German social legislation has been oriented directly on the ICF. The principles of participation and goal orientation are anchored in the statutes and make Germany one of the most progressive countries in terms of framework legislation for implementation of the ICF. However, difficulties continue to make themselves felt in the everyday practical application. In many areas of Germany's structured social security system the ICF is applied either not at all or only to a small extent and incompletely.

Medical rehabilitation has been a pioneer in this respect. It is in this field that the ICF is most often used and is thus relatively well-known among experts and institutions. Use in vocational rehabilitation, by contrast, is still in its infancy. The recommendation paper issued by the German Association for Rehabilitation (DVfR) is an important step towards the practical implementation of ICF in this field of rehabilitation.

In Germany the DVfR has an important function in medical, school, vocational and social rehabilitation. It influences policy-making concerning the disabled, provides guidance on rehabilitation issues, disseminates information and serves as an interdisciplinary forum where experts can exchange data and experience. Its membership consists of organisations, federations and individuals.

The recommendation for the application of the ICF was developed in a working group consisting of experts from all fields of vocational rehabilitation and the Federal Ministry of Labour and Social Affairs. It was chaired by Professor Seyd from the University of Hamburg.

The Recommendation Paper is intended to contribute to promoting the use of the International Classification of Functioning, Disability and Health (ICF) in vocational rehabilitation on a wide front. It sees potential areas of application in:

- Establishing needs and selecting measures for vocational rehabilitation
- Quality management for service providers
- Documentation and reporting

The paper makes concrete recommendations for the use of the ICF in the above fields. In particular, it calls for the structure of chapters in the ICF to be used in all documentation and reporting. The intention is to develop a form of representation which is compatible with the maximum number of usages and enables interfaces at any time.

In addition to concrete suggestions the Paper also contains strategic proposals for promoting further ICF use in vocational rehabilitation, in which the DVfR will play a key role. These include:

- Continuous progress reporting and providing transparency on the spread and usage of, and experience with, ICF application.
- Emphasis on the application of the ICF's bio-psycho-social model as an ongoing process and constant support for the rehabilitation institutions in developing their approaches and methods along ICF lines.
- Advice and information for practical application and the development of a website with case studies
- Support for the development of ICF-oriented compatible documentation systems, for which the DVfR has proposed a joint project involving all institutions.

The Recommendation Paper expressly emphasises that implementing the ICF as the natural basis of rehabilitation practice requires a declaration of political will on the part of the ministries, federations and organisations. For this reason it is all the more important to have an exchange of experiences with functioning applications and a policy of providing wide-ranging information to experts in this field.

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The Netherlands

Friction between ICD and ICF?

Working in the rehabilitation of low vision, I encountered a number of cases of the counter productive effect the use of bad terms to designate diseases or disorders can have. A number of terms used within the ICD contain descriptors of Functions, e.g. in Congenital Stationary Night Blindness

(CSNB ICD-10 H53.6), where the blindness refers to the lack of function. This is the case for more terms used in ophthalmology (e.g. achromatopsia, amarausis), but also in more general fields, cf. for instance the term Albinism. In fact the whole category H53 of the ICD-10 only contains function descriptors. Now that the ICF distinguishes so clearly the function from the disease or disorder it is worthwhile to consider a careful revision of names used in the ICD.

It is not only a cosmetic operation, or even an academic one, since the problems that can be caused by this use of inadequate terms can be quite serious. In my paper that was published on the internet in January this year (Riemsлаг, 2009) I described two brothers, who had been identified as suffering from incomplete CSNB by the special characteristics of their Electroretinogram (ERG) early on in their lives, the measurement of which was indicated on the basis of the family anamnesis. The younger of the two, now 13 yrs old, desparately asked his parents to be allowed to go his own way on his bike in the dark. The older one never showed any interest for that. By measuring their functioning in the dark in our light laboratory, we discovered that the younger one could see and recognize the majority of test objects present at moonlight illumination level. His older brother needed three times the office light level, which by the way is 15000 (!) times as much as moonlight level. In the medical record of the boys a statement of the child psychologist can be found: "the older boy, has accepted his disability, the younger one is not up to it yet..."

The presentation of this case illustrates how we create(!) participation problems by the use of inadequate names for diseases or disorders. A disease name that contains a negative descriptor for a function, triggers an assumption about the lack of that function too easily. Once the physician has indicated a diagnosis as such, it seems unnecessary to explain the conse-

quences of the disease or disorder, because the name "explains" itself.

In case of CSNB, in the early days when this disorder was discovered and one could not know the cause, the name was a good descriptor of a group of patients with equal characteristics. However, now that we know the cause (a synaptic block, either for the rods, or the cones or both) an alternative name that contains the anatomic structure that is disrupted springs to mind easily. By using such an alternative, when presenting the name to the patient, or his or her parents, the physician is implicitly challenged to explain the consequences of the disorder. In fact, for many of the terms in the category H53 anatomical structures apply that the cause of the disturbance has yet been identified, and the terms should be adapted accordingly.

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FCC Riemsлаг (2009) Visually impaired children: "coming to better terms". Doc Ophthalmol. Published online 10 januari 2009, Springer.

ICF in Home Care Services Development

In November 2008, a consortium consisting of IBM Netherlands, Orbis Medical and Care Concern, the University of Twente, TKH, IZIT and MobiHealth B.V. started the User-Tailored Care project, in short U-Care [1]. The project is a 4-year multi-disciplinary research project and its main concern is home care innovation. U-Care aims to develop an ICT services layer for integrated home care systems, to provide tailorable and non-intrusive care services for elderly. In this article, we will describe how the ICF aids us in the requirements elicitation process.

In order to determine the actual desired services that could run on the

envisioned services layer, field research has been carried out at the Orbis Hoogveld care centre to elicit user requirements and a workshop has been held to prioritize desired functionalities.

The ICF has been used extensively as a conceptual basis for field research. The health model components were used as a basis for the questions in semi-structured interviews. In total, 10 clients and 3 caregivers of Orbis Hoogstaete in Sittard were interviewed. The clients were asked about their health: physiological and anatomical aspects, activities of daily life, social participation, personal and environmental context; and about their use of / wishes for functions that can be supported by means of technology. The holistic model proposed by the ICF aids in collecting information about all these aspects, whereas the ICF Core Sets enabled us to zoom in on specific items in case of clients with conditions such as stroke or COPD.

The interviews resulted in an understanding of health and daily life of the inhabitants, and revealed the following items of interest for future technological support: providing daily structure, memorizing events, information on activities, support for medication, use of public transport and finding friends to conduct activities with. In the scenario workshop that followed, emphasis was put onto generating scenario elements for three types of services: activity related services; medication services including simple self-measurements; and community services. In the following stages of the project, the scenarios will be elaborated and presented to both end-users and stakeholders for validation. These scenarios are stories of the envisioned use of the to-be-developed technology, in a day out of the life of non-existing persona's based on the actual inhabitants. The advantage of scenarios is that they package envisioned developments in an actual context, which make the development communicable between engineers and non-engineers. After validation of the proposed services, they will be

developed and integrated, and tested in the care centre.

Elderly home care is one of the research areas at the Telemedicine Group in which the ICF is used. We also study the use of the ICF to aid in the development of health-related virtual communities [2] and the development of telemedicine services [3]. In these cases, health is an application domain for computer science and as such the ICF aids in understanding of functioning and in the development of health services.

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References

- [1] <http://ucare.ewi.utwente.nl>
- [2] B.J.F. van Beijnum, P. Pawar, C.B. Dulawan, H.J. Hermens, Mobile Virtual Communities for Telemedicine: Research Challenges and Opportunities, *Internat J of Comp Sc & Applic*, 7(Feb 2009)2, 19-37.
- [3] J.W. van 't Klooster, B.J.F. van Beijnum, H.J. Hermens, Putting the Patient at the Centre: Making Telemedicine Services Personal Again, proceedings of PervasiveHealth 2009 conference, London, 31 March - 3 April 2009.

Updating ICD-10 - Balance between Chaos and Fossilization

The change from ICD-9 to ICD-10 was such an effort and so costly, that it was hoped to extent the period of usability of ICD-10, if interim adjustments – updates - could be made. That the change was experienced as more costly than the implementation of previous ICD editions, was largely due to the computerisation of coding and processing. As is well-known, every year minor updates to ICD-10 are issued, while major updates are saved for tri-annual release. A wise choice from the point of view from the designers and maintainers of ICD.

From the point of view of the producers and consumers of statistical Cause of Death data, however, the annual minor updates and tri-annual major updates are a cause of much confusion. It is hard to disseminate, besides the annual statistical data, the

exact subtleties of the changes in ICD-classes and coding rules.

Consequently, the numerical changes in time series, introduced by the updates, are more likely to be misinterpreted, than that they clarify matters. Moreover, as it is not feasible that all countries implement the ICD-updates in the same year, for international comparisons, data from one year must be interpreted with several update-versions in mind. The cumulative updates now comprise more than 300 pages in print. Imagine an international database of Cause of Death data: how can the meaning for each ICD-code for each country, using one of a dozen update versions, be explained to the user?

In retrospect, which is admittedly always easier then in prospect, the costs and efforts necessary for annual updates, and its limitations have been underestimated. It is necessary to consider, besides the conceptual improvements of the classification by the updates, the realities of introducing the updates in almost 200 countries at the same time.

The above holds, perhaps in a lesser degree, also for morbidity applications of ICD-10. The need for changes, i.e. updates, to the original version of the ICD-10 might be stronger in the morbidity field, than in mortality. For morbidity, perhaps, there is also a stronger need for more detail than in mortality, and the medical record can provide sufficient information for more detailed classification, while the medical death certificate cannot.

While designing ICD-11, serious consideration should be given to a situation where updates are limited to the correction of *serious* errors and *major* medical unforeseen developments, and not for gradual improvement of the classification. We have to ask ourselves whether an ICD-edition that cannot be used without changes for at least a decade, is mature enough to be taken into production on world scale.

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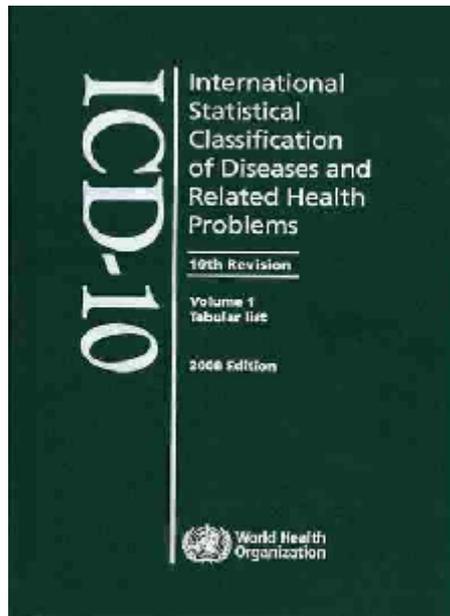
World Health Organization

International Statistical Classification of Diseases and Related Health Problems

ICD-10, 2008 Edition

This new edition of WHO's International Classification of Diseases, 10th Revision (ICD-10) has been fully updated for the second time. Originally published in the early 1990s, ICD-10 now incorporates all edits and updates since 1996 up to the end of 2008. In addition, the numbering system has changed and now clearly indicates the year that the updates were incorporated.

Fifteen years of daily international use of the classification have resulted in many improvements, and these have been incorporated into volume 1, the index, rules and guidelines. As a



result, the classification is now easier to use and implement, accommodates new scientific knowledge, makes it easier to understand health statistics and improves comparability of international mortality statistics. The thousands of changes that have been introduced are based on about 400 recommendations for Volume 1, 90 recommendations for Volume 2, and more than 700 recommendations for Volume 3. They are the product of a continuous international collaboration.

The ICD is the international standard diagnostic classification for all general epidemiological purposes, many health management purposes and clinical use. These include analysis of the general health situation of population groups and monitoring the incidence and prevalence of diseases, as well as other health problems with respect to variables such as the characteristics and circumstances of the individuals affected, reimbursement, case-mix, resource allocation, quality, patient safety, and guidelines.

ICD is used for health information purposes in public health, primary, secondary and tertiary care settings. In particular, it is used to classify diseases, accidents, reasons for encounter, and other health problems recorded on many types of health and vital records including death certificates and health records. In addition to facilitating the storage and retrieval of diagnostic information for clinical, epidemiological and quality purposes, the resulting records form the basis for compiling national mortality and morbidity statistics by WHO Member States. ICD serves a language-independent framework for classification of diseases and has been translated into more than 40 languages.

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ICF References

- 2592 Auger C, Demers L, etc.**
Development of a French-Canadian version of the Life-Space Assessment (LSA-F)
Disab and Rehab 2009 4(1) 31-41
- 2585 Bar-Shalita T, Seltzer Z, etc.**
Development and psychometric properties of the Sensory Responsiveness Questionnaire (SRQ)
Disab and Rehab 2009 31(3) 189-201
- 2584 Blaney, Lowe-Strong A**
The impact of fatigue on communication in multiple sclerosis. The insider's perspective
Disab and Rehab 2009 31(3) 170-180
- 2570 Boyce W, Cote L**
The influence of HIV/Aids on community-based rehabilitation in Dar Es Salaam, Tanzania
Asia Pacific Disab Rehab J 2009 20(1) 52-72
- 2579 BurrIDGE JH, Turk R, etc.**
The relationship between upper limb activity and impairment in post-stroke hemiplegia
Disab and Rehab 2009 31(2) 109-117
- 2573 Cheng HMS, Sampaio RF, etc.**
Disabilities of the arm, shoulder and hand (DASH), Disab and Rehab 2008 30(25) 1901-09
- 2589 Cieza A, Hilfiker R, Boonen A, etc.**
Towards an ICF-based clinical measure of functioning in people with ankylosing spondylitis
Disab and Rehab 2009 31(7) 528-537
- 2557 Corrigan R, McBurney H**
Community ambulation: Environmental impacts and assessment inadequacies
Disab and Rehab 2008 30(19) 1411-1419
- 2590 Daley C, Simeonsson J, Carlson E**
Constructing and testing a disability index in a US sample of preschoolers with disabilities
Disab and Rehab 2009 31(7) 538-552
- 2581 Demers L, Poissant L**
Connecting with clinicians: Opportunities to strengthen rehabilitation research
Disab and Rehab 2009 31(2) 152-159
- 2591 Federici S, Meloni F, etc.**
WHO DAS II: Contribution to the Italian validation, Disab and Rehab 2009 31(7) 553-564
- 2560 Fougeyrollas P, Noreau L, etc.**
Measure of the Quality of the Environment
Quebec 2008
- 2588 Geertzen JHB, Es CG van, etc.**
Sexuality and amputation: a systematic literature review, Disab and Rehab 2009 31(7) 522-527
- 2578 Glick Teverovsky E, etc.**
Functional characteristics of children diagnosed with Childhood Apraxia of Speech
Disab and Rehab 2009 31(2) 94-102
- 2558 Hammel J, Magasi S, Heinemann A, Whiteneck G, Bogner J, Rodriguez E**
What does participation mean? An insider perspective from people with disabilities
Disab and Rehab 2008 30(19) 1445-1460
- 2587 Hartley, S, Murira G, etc.**
Using community/researcher partnerships to develop a culturally relevant intervention for children with communication disabilities in Kenya, Disab and Rehab 2009 31(6) 490-499
- 2593 Huang IC, Sugden D, etc.**
Children's perceptions of their use of assistive devices in home and school settings
Disab and Rehab 2009 4(2) 95-105
- 2571 Imms, C**
Children with cerebral palsy participate: A review of the literature
Disab and Rehab 2008 30(24) 1867-1884
- 2564 Klerk M de**
Meedoen met beperkingen
Sociaal en Cultureel Planbureau 14 2007 238 p
- 2580 Kuipers P, Foster M, etc**
Using ICF-Environment factors to enhance the continuum of outpatient ABI rehabilitation
Disab and Rehab 2009 31(2) 144-151 pp
- 2582 Limbeek J van**
Prestatie-indicatoren: een complexe materie
Revalidata 2009 31(147) 38-42
- 2595 Meester-Delver A**
The capacity Profile: a method to classify additional care needs in children with neurodevelopmental disabilities
Revalidata 2008 30(143) 25-26
- 2559 Munir F, Yarker J, Haslam C**
Sickness absence management: Encouraging attendance or 'risk-taking' presenteeism in employees with chronic illness
Disab and Rehab 2008 30(19) 1445-1460
- 2583 Napel H Ten, Leeuwen MJW van, Vries Robbé PF de**
Nederlandse terminologie voor pijn, Nijmegen 2007 100 p
- 2563 Nictiz**
Procesbeschrijving Hulpmiddelenzorg Den Haag 2008 23 p
- 2576 Pagan-Rodriguez R**
An empirical analysis on the incidence of part-time work among women with disabilities
Disab and Rehab 2009 1(2) 73-83
- 2561 Post MWM, Witte LP de, etc.**
Development and validation of impact-s, an ICF-based questionnaire to measure activities and participation, J Rehab Med 2008 40 620-627
- 2577 Sato D, Kaneda K, etc.**
Comparison two-year effects of once-weekly and twice-weekly water exercise on health related quality of life of community-dwelling frail elderly people at a day
Disab and Rehab 2009 31(2) 84-93
- 2575 Schneider M**
The difference a word makes: responding to questions on 'disability' and 'difficulty' in South Africa
Disab and Rehab 2009 31(1) 42-50
- 2549 Schneider M, Couper J**
Testing a disability schedule for Census 2011: Summary report on 26 focus groups, 2007
- 2567 Siebes RC, Ketelaar M, etc.**
Afstemming van hulpvraag, behandeldoelen en behandelingszorg voor kinderen met CP, Revalidata 2007 29(136) 12-15
- 2569 Singal N, Jeffery R**
Transitions to adulthood for young people with disabilities in India
Asia Pacific Disab Rehab J 2009 20(1) 15-40
- 2568 Skarakis-Doyle E, Doyle PC**
The ICF as a framework for interdisciplinary doctoral education in rehabilitation
Int J Speech Lang Pathol 2008 10(1-2) 83-91
- 2586 Soble SE, Shearer C, etc.**
Relation between post-stroke satisfaction with time use, perceived social support and depressive symptoms, Disab and Rehab 2009 31(6) 476-483
- 2572 Spanjer J, Krol B, Brouwer S, Groothoff**
Inter-rater reliability in disability assessment based on a semi-structured interview report
Disab and Rehab 2008 30(24) 1885-1890
- 2551 Statistics South Africa**
Report on Census Content Research Study: Disability Schedule, November 2006, 2007
- 2552 Statistics South Africa**
Census 2001: Prevalence of Disability in South Africa, 3, 2005
- 2553 Statistics South Africa**
Census 2001: Census in Brief, 2001
- 2554 Stern SM**
Counting people with disabilities: How survey methodology influences estimates in Census 200 and the Census 2000 Supplementary survey
Poverty and Health Statistics Branch, U.S. Census Bureau, HHES Division
- 2594 Steultjens MPM, Ostelo R, etc.**
Indicaties voor verwijzing van ouderen naar revalidatiegeneeskunde: late gevolgen van poliomyelitis, artrose van heup of knie, en ziekte van Parkinson
Revalidata 2008 30(143) 3-6
- 2566 Tepper M, Oosterkamp KJ, Aris E**
Introduction of ICF and Barthel Index in Stroke management in developing countries
Revalidata 2008 30(146) 21
- 2555 UN Statistical Division**
Human Functioning and Disability
<http://unstats.un.org/unsd/demographic/sconcerns/disability/>
- 2574 Vosloo S-M**
The functioning of primary school learners with paraplegia/paraparesis in mainstream schools in the Western Cape, South Africa
Disab and Rehab 2009 31(1) 23-31
- 2562 WHO, Regional Office for South-East Asia**
11 health questions about 11 SEAR countries
ISBN 9789290222477 2007 310 p
- 2556 WHO/UNESCAP**
Training Manual on Disability Statistics
- 2565 Zee CH van der, Post MWM, etc.**
Het meten van participatie als uitkomst van poliklinische revalidatiebehandeling: Meten=Weten 2; een prospectieve multi-centre studie, Revalidata 2008 30(146) 12-16