

Editorial Board

Dr Marijke W. de Kleijn-de Vrankrijker Drs Huib Ten Napel Dr Willem M. Hirs

Realization and Design A.C. Alta, Studio RIVM

ri.e. riim, budio ra

Published by

WHO-FIC Collaborating Centre in the Netherlands.

Responsibility for the information given remains with the persons indicated.

Material from the Newsletter may be reproduced provided due acknowledgement is given.

Address

WHO-FIC Collaborating Centre Department for Public Health Forecasting National Institute of Public Health and the Environment (RIVM), P.O.Box 1, 3720 BA Bilthoven, The Netherlands.

Telephone: 0031 30 274 2039/4276 Fax: 0031 30 274 4450 Website: www.rivm.nl/who-fic

E-mail secretariate: Lummy.Blomer@rivm.nl

ISSN: 1388-5138

Is there scientific evidence ...?

Contents

Editorial	2
International organisations	
WHO-FIC Network Meeting	3
CNP & WHO-FIC	3
CD Revision	4
Harmonization of ISO 9999 and ICF	4
FIC around the World	
China	
Development and application of ICF	5
France	
News of the ICF French-speaking network	6
Latin America	
WHO Collaborating Centre for the FIC in	
Mexico (CEMECE)	6
Latin American and Caribbean Network	
for the promotion of ICF	7
The Netherlands	
The Capacity Profile (CAP)	8
CD Implementation in the Netherlands	9
ICF References	9



WHO Family of International Classifications (FIC)

NEWSLETTER

Volume 7, Number 1, 2009

Is there scientific evidence for the benefits of international classifications?

A question out of the audience

Most readers of this newsletter will be acquainted with delivering an address on ICD or ICF before an audience. We are prepared for frequently asked questions such as: Is there a definition for classification?

The answer can be derived from the WHO-FIC family paper, http://www.who.int/classifications/en/FamilyDocument2007.pdf:

'The ISO standard 17115 defines a classification as 'an exhaustive set of mutually exclusive categories to aggregate data at a pre-prescribed level of specialization for a specific purpose'. Classification involves the categorization of relevant concepts for the purposes of systematic recording or analysis. The categorization is based on one or more logical rules.'

And we can extend our answer by referring to the same paper, including the formal benefits of international classifications by their aims.

'ICD and ICF are the core classifications in the Family of International Classifications that have been endorsed by the WHO to describe various aspects of the health and the health system in a consistent manner. The purpose of the Family is to assist the development of reliable statistical systems at local, national and international levels, with the aim of improving health status and health care.'

However, what answering the tenacious questioner, who wants to know our opinion on the scientific evidence of the benefits of classifications such as ICD-10 and ICF.

I do not know a written overview of all aspects that has to be covered in answering this apparently innocent question. Nevertheless, we can have a try in front of an inquisitive audience.

Scientific evidence presupposes a scientific procedure. I remember three phases: exploration, description and explanation. Exploration needs an open mind; the categories of an established international classification might be inadequate to denote an obviously new phenomenon. In that case there is a need for a new category. As long as the international classification is in use, one has to code that phenomenon in the category 'other'. If there is an update mechanism a new (sub)-category might be implemented, e.g. Avian flu in ICD-10; otherwise one has to await a new revision. Furthermore the new concept might conflict with the existing subdivision in the classification. A regrouping and a different selection of concepts might represent the new insights better than one single category. The conclusion might be that in the phase of exploration the scientific evidence for the benefits of an international classification is restricted; new concepts or categories or subdivisions might help more.

The same situation goes for explanation. If an established theory cannot be falsified, e.g. a significant number of specific syndromes proves to be autoimmune diseases, a regrouping of widespread subcategories under one new category appears to be justified (my examples are of course fully speculative, I do not want to interfere into the current revision process). Again, the scientific evidence for the benefits of an international classification is restricted. It is for reason of an improvement in exploration and explanation that we revise international classifications and does not stick for ever to the common language of the existing ones.

In my view, the question on the scientific evidence for the benefits relates mainly to the descriptive features of international classifications. Is an international classification useful in the mutual communication between professionals either within the same discipline or between diverging disciplines? Does it help in the communication with clients/patients? Does the interchangeability of data give a more complete picture of somebody's health status? Does the use of an international classification contribute to more satisfaction with health care and quality of life? Finally, the comparison of data from the most prominent applications of ICD, the underlying cause of death and main discharge condition, does it have a surplus value?

To start with the last question, the answer is an affirmative one. We can refer to a famous epidemiologist in the Netherlands, dr. Dick Hoogendoorn, who analyzed for a few decades epidemiological disease data, recorded in mortality and morbidity statistical systems, in the second half of the twentieth century. Especially preventive medicine has benefitted from his pioneering work. The more recent thesis of Lars Age Johansson, summarized in our last newsletter (Vol. 6 No 1, 2008), demonstrates that this kind of benefits of the multiple use of international classifications are difficult to underpin. One has to analyze a lot of coded data and the

conditions of applications, prior to come to the conclusion that in an ageing population an increasing number of deaths are due to an accumulation of etiologically unrelated conditions; justifying by this conclusion that both systems deliver partly independent, epidemiological valuable information.

Even restricting the evidence question to a single application of one classification, the disadvantages often exceed the benefits. The (scientific) criticism on ICD has resulted in an extensive family of derived and related classifications, and supposed relatives such as SNOMED CT. All these concept systems have of course a specific purpose, justifying their existence, but in the end it tells that the scientific evidence for the benefits of the core, the ICD, is at least problematic. Due to the coding culture different derived and related classifications are developed instead of different applications of one classification. I mean with coding culture the practice to apply a classification directly by using its codes according to a set of application rules.

Probably a different situation holds for ICF. In ICF there are also guidelines for coding (appendix 3), but a number of applications are based upon existing measurement instruments or develop these instruments by using parts of ICF. Up to now only one derived classification, ICF-CY, and one related classification, ISO-9999, exists. The scientific evidence for the benefits of the ICF might be less problematic than the benefits of the ICD. In ICF we really have to do with different professionals, a language that clients can understand, the possibility of a full profile of the functioning, disability and health at different levels, running from the individual to the population at large. Questions on communication, comparability of data, a more complete picture of health status, satisfaction with health care and quality of life might get a richer answer by applying ICF next to ICD or one of its derived/related classifications. Recently, there was some – indirect –

evidence for the benefits of the ICF. It was defended in a Dutch dissertation that where the RAP approach was integrated in inpatient care, clients were more satisfied with that care and their quality of life, than in care units where this was not the case. The RAP, Rehabilitation Activity Profile, is an assessment instrument related to ICF, with specific parts for the different disciplines in the rehabilitation team, see John Verhoef, Integrated Care for Patients with Rheumatoid Arthritis Proefschrift, Leiden 2007, 152 p.

We would like to have available more examples on the scientific evidence for the benefits of ICF and ICD. In our view this would help to enhance the status of the family and to convince persons and institutions to use international classifications.

For information:

Willem M. Hirs, senior advisor, WHO-FIC Collaborating Centre in the Netherlands e-mail: willem.hirs@rivm.nl

Editorial

We wish all readers a good and fruitful 2009. Looking at the activities accomplished last year, 2008 was fruitful. Our collaborating centre has been invited by the ministry to start the implementation of the ICD-10 (Dutch version) in all Dutch hospitals. We see this activity as a good start enabling us to contribute to the ICD updating and revision process. A corrected reprint of the Dutch version of the ICF was published and the Dutch translation of the ICF-CY is available now.

This newsletter starts with a question coming from the audience, and we hope to receive your reactions or the way you should reply to this kind of questions. Furthermore we offer information concerning the ICD revision, ICNP (the newest related member of the WHO-FIC) and some contributions presented during the recent annual WHO-FIC Network meeting in Delhi, India; see report and papers at

www.who.int/classifications/network/meeting2008/en/index.html.

In August 2008 the annual ICF NACC meeting was organized back-to-back to

the RI conference in Quebec. All ICF related presentations are at www.cihiconferences.ca/icfconference.

Life must go on, but some dear persons had to leave us too early. We regret the death of Marijke (Muller -)Scholman, Philip Wood and Henk Lamberts. They contributed substantially to the development and use of health related classifications:

- Philip Wood, 1928 2008, father of the ICIDH:
- Marijke (Muller-)Scholman, 1939 2007, she introduced the ICIDH in Canada;
- Henk Lamberts, 1940 2008, founder of the ICPC.



Philip Wood, Paris 1988

International Organizations

WHOFIC Network Meeting

25 - 31 October 2008



The 2008 Annual meeting of the WHO Network of Collaborating Centres for the Family of International Classifications in Delhi, India, was hosted in the Heritage Village Manesar hotel by the WHO Regional Office for South-East Asia in collaboration with designate Collaborating Centre for WHO-FIC in India at the Central Bureau of Health Intelligence (CBHI), Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

All documents are published on the website of the 2008 Annual Meeting of the WHO-FIC Network, see http://www.who.int/classifications/network/meeting2008/en/index.html. See that website for the meeting report summary to overview the results. We highlight in this Newsletter a selection of posters that can be downloaded, especially revealing the implementation of the ICF in three priority areas of application:

Social policy

The Italian WHO-FIC Centre and its partners presented the prelimnairy results in a two year research project, financed by the Ministry of Labour, Health and Social Policy, on the development of a common conceptual framework for disability assessment and certification at national and regional level. The poster (D007p) is entitled: *Towards a disability certification reform in Italy*.

Surveys and censuses

The Italian Ministry supported also an observational multi-centre national study to assess the needs of Persons with Disability getting invalidity pension, through the cooperation of researchers (neurologists, psychiatrists, psychologists, etc.), persons with disability and their family members. This project is the widest door-to-door Italian study on disability and enabled researchers to identify common problems of Italian persons with disability, independent of health condition, age and other variables; its results are published in the 'White Book of Invalidity in Italy'. The poster (D031p) is entitled: Population Survey on Invalidity Pension in Italy: defining needs of Persons with Disabilities with ICF.

Health information systems and measuring health outcomes

Six posters at least reported on this broad field of application. An Update of the ICF Core Sets Development (D046p) was given and two of its projects were described specifically: Development and evaluation of an ICF-based patient education program for stroke patients (D045p) and The use of the ICF Core Sets for medical

reports of the German national pension insurance of patients suffering low back pain and chronic widespread pain (D044p).

Again an Italian field trial catches the eye: Structuring rehabilitation project and program through the ICF-CY conceptual framework in a neuropediatric rehabilitation hospital (D013p). It was concluded that the ICF-CY may be used to inform the project and program; the positive consequences need, however, be weighted against the perceived increase in complexity and the increase of workload.

Japan reported on *Changes of Activities over a Year in Older Outpatients of seven General Hospitals* (D028p).

At last a poster on the ICF in French contains information on a *Decriptive Study of Functional and Contextual Criteria for Sick Leave Prescriptions in General Practice in France and Belgium, using the ICF* (D042p)

For more information:

Willem M. Hirs, senior advisor, WHO-FIC Collaborating Centre in the Netherlands e-mail: willem.hirs@rivm.nl

ICNP & WHO-FIC

In the Delhi meeting of the WHO-FIC Network in October 2008 the ICNP has been accepted by the council as a related family member. Part of the acceptance is that the precise relation between the ICNP terminology and terms within the family members of WHO-FIC is elaborated in terms of conceptual conformity. The ICNP e.g. contains terms from ICF, ICD-10, ICPC, ISO9999, ICECI. It is important to harmonize terms within the family, but first and particularly a new member needs to bring its terminology in line with the existing family members.

A report drawn up by the Dutch Centre, and supported in the August meeting 2008 of the Family Development Committee at DIMDI/Germany served as the basis for the start of the harmonization of the ICNP within the family. As part of an ongoing effort to harmonize ICNP, a plan will be drawn up by the International Council of Nurses (ICN) that covers all parts of the ICNP related to the family. The first step in this plan is the mapping of ICNP and the International Classification of Functioning, Disabilities and Health (ICF). This work is now underway. This is a large project, involving collaborators from Switzerland, the Netherlands and the US. The purpose of this mapping is not only to harmonize the classifications within the family, but also to trace terms that might be of relevance for either the ICNP or one of the family members.

For information:

Huib Ten Napel

Email: huib.ten.napel@rivm.nl

ICD Revision

The International Classification of Diseases (ICD) is a key instrument of the World Health Organization and a core member of the WHO Family of International Classifications. The ICD is used by public health bodies, clinicians and researchers, ensuring the provision of language and systemindependent definitions that are applied for: National and International health statistics (mortality and morbidity); epidemiology, surveillance and monitoring; individual patient records and electronic health records; reimbursement and health system financing; reference for treatment guidelines, scientific literature and research; and quality assessment at the level of individual cases up to assessment of health system outcomes and monitoring.

The ICD forms the basis for numerous additional & derived modifications. WHO owns all rights and processes that relate to ICD (and the other core classifications) and has the responsibility to ensure conceptual consistency in all changes that are introduced accordingly. The ICD has been revised every 10 years, with the exception of the 20-year interval between the revisions of ICD-9 to the most recent ICD-10. The ICD-10 was completed in 1990 and the WHA requested that it should be revised as necessary.

In the Network meeting, October 2008 in New Delhi, India, a draft revision plan and organization structure has been presented, based on goals of revision from ICD-10 to ICD-11. These goals address items such as: update ICD to accommodate new scientific, clinical and public health knowledge; internet-based technologies for information gathering, integration and sharing; integration of and cross-referencing with health related terminology systems such as SNOMED -CT: harmonization with ICD-related and derived classifications; build in needs driven adaptations based on real Use Cases; and a strong focus on facilitating the implementation in developing countries.

A first Beta-draft is planned for 2011, after which Field trials will take place. The official publishing in the six WHO languages is expected for 2014.

The revision process of ICD is to complex to be explained in this Newsletter in detail. More details will follow in subsequent issues.

For information:

1

Dr Robert Jakob, Medical Officer WHO, Geneva E-mail: jakobr@who.int

International Organization for Standardization

Harmonization of ISO 9999 & ICF

In March 2007 the fourth edition of the ISO 9999, a related member of the WHO family of international classifications (WHO-FIC), was published. In ISO 9999, Assistive products for persons with disability -Classification and terminology, assistive products are classified according to their function. ISO 9999 was prepared by Technical Committee ISO/TC173, Assistive products for persons with disability, Subcommittee SC2, Classification and terminology. Translations in many languages are started soon after publication of the international standard controlled by national standardisation institutions. The current version has been translated in many languages. The Dutch translation of the fourth version will be published at the end of 2008 or the start of 2009.

During the mid-year FDRG meeting in Quebec in August 2008 two options for harmonization of the first level subdivision of ISO 9999 and chapter 1, *Products and technology*, of the list of environmental factors of ICF were discussed. The options were formulated by WG11, the working

1

Proposed subdivision	ICF	ISO9999
products used to test / measure / monitor functioning and contextual factors	(e115)	(04)
products used to treat / prevent problems in functioning and to train functions and activities	(e115)	(04)/05
products used in self care	(e115)	09/(06)
products used in domestic life	(e115)	15
products used in mobility	e120	(06)/12 / (18)
products used in communication / information	e125	22
products used in education / learning	e130	xx
products used in employment	e135	(24)/(27)
products used in recreation / leisure / social, cultural and spiritual life	e140/e145	30/xx
design and construction of buildings	e150/e155	18
consumption goods, incl. food and drugs	e110	xx
products used in land development	e160	xx
Assets	e165	xx

group for the ongoing Revision established by Subcommittee 2. Based on the discussion in Quebec a proposal was formulated for the FDCmeeting in New Dehli by Yvonne Heerkens (the Netherlands, chair of ISO/TC173/SC2), Theo Bougie (the Netherlands, member of ISO/TC173/SC2) and Petra Winkelmann (Germany, member of ISO/TC173/SC2). The three authors are also experts of Task Group 7 'Environmental Factors'. As it was not possible for the authors to attend the meeting in New Dehli, Marijke de Kleijn-de Vrankrijker, head of the **Dutch Collaborating Centre of WHO-**FIC, presented the proposal. In the proposal an explanation is given how chapter 1 of the list of environmental factors of the ICF and the ISO9999 classes could be harmonized and be complementary to each other. The option presented in this proposal is the one which has been endorsed by the FDRG in Quebec. A process for coordinating the efforts of DDRG and WG11 of ISO is now under consideration.

The results of the New Dehli meeting and the way to go forward were discussed by WG11 and SC2 in November 2008 in Helsinki. Based on this discussion the publication of Committee Draft of the fifth edition of ISO 9999 is postponed to give the possibility to elaborate on the consequences of the harmonization for ISO 9999. One of the decisions already made is to include a new class in ISO 9999, class 31 Assistive products used in employment. The fifth edition of the ISO 9999 will be published at the end of 2011. The revision process of the ISO 9999 parallels, in time, the present update and revision process of the ICF.

For information:

Yvonne Heerkens, e-mail: heerkens@paramedisch.org & Theo Bougie, e-mail: theo.bougie@brt-advies.nl

For information on China column:

Qiu Zhuoying Ph.D, Research Institute of Rehabilitation Information, China Rehabilitation Research Center, Beijing, China, 100068

e-mail: qiutiger@hotmail.com

FIC around the World

China

Development and application of ICF in China

The ICF was officially endorsed by 191 WHO Member States in the Fifty-fourth World Health Assembly on 22 May 2001 (resolution WHA 54.21) and was endorsed for use in Member States as the international standard to describe and measure health and disability.

China, as a WHO official member, has participated in the development of ICF in all respects since 1998 when Dr. Qiu Zhuoying and Dr. Wu Xiangguang, invited by WHO, attended the Tokyo meeting and officially participated in the development of ICF. A research team led by Prof. Qiu Zhuoying, from China Rehabilitation Research Centre, had done many works on the development of ICF Chinese Version (one of six official versions of ICF). The research results have been contributed to the development of ICF and ICF-CY and applied in many aspects: such as disability statistics (the 2nd National Sampling Survey of Disabled Persons), clinical and rehabilitation medicine practice, disability services, professional training and so on.

The development, application and training of ICF in China mainly focused on the following aspects:

- Application of ICF in the 2nd National Sampling Survey of Disabled Persons. In 2006, China adopted ICF as the official framework for measuring disability in the general population (in national sampling survey) which contained the criteria, procedures, sampling, statistics and research; it developed a scheme and tools for the survey, including the definition, grading system, core survey items, screening and assessment tool following WHO-DAS-II, questionnaire design and encoding system of the survey data, a database from the survey has

- developed by experts to provide standardized information for professionals. The terminology of disability such as in BF, BS, A & P and environment is well known by applied ICF in the survey.
- Application of ICF in public Policy. China has accepted the ICF notions and adopted in legislation related the disability, mainly including in the service for the disability, implemented UN convention on Right for People with Disability, amended the Law for the protection for the people with disability, revised the national classification of disability with ICF framework, integrated the concepts into education, employment and other related areas.
- Application of ICF in clinical setting. The principle of ICF has been adopted by the professionals at the clinical setting progressively. For example, they consider ICF as a major framework of *health outcome assessment*, develop a comprehensive rehabilitation plan, standardize the instruments, develop the clinical tools, establish the disability-related health database, and manage the clinical terminology referring to ICF.
- National training seminar, publications, and lectures on ICF. In January 2003, a special issue of ICF had been published by Chinese Journal of Theory and Practice of Rehabilitation. In 2005, a special chapter on ICF, written by Dr. Qiu Zhuoying, had been published in China Rehabilitation Medicine edited by Dr. Zhuo Dahong. The ICF had been one part of rehabilitation education at college level. In April 2007, a national training program on ICF had been conducted in China and more than 30 peoples from health care, medical rehabilitation and social services for people with disability had attended the training course. With the promotions by the official advocacy and promotion such as seminar, workshop and symposium, ICF is accepted by more and more Chinese professionals in health care, disability and rehabilitation field.

France

News of the ICF French-speaking network

Since 2004, the WHO-FIC Collaborating Centre Inserm-CTNERHI for the ICF in French, situated in Paris, has developed, as one part of its activity, a French-speaking network aiming at (i) disseminating the ICF, (ii) training potential users and trainers, (iii) promoting its implementation and use for assessment tools, studies and information systems. Collaborations have been established with Belgium, Switzerland, Ouébec, Algeria, Tunisia and France, involving professionals, Disabled People's Organizations' representatives and social scientists in various health and disability domains.

The functioning of the Frenchspeaking network consists in several thematic groups that meet three to four times a year and communicate through Internet the rest of the time. Each group is coordinated by a specialist of the chosen theme. Three teleconferences and one face to face meeting a year are organised for the groups' coordinators to report and assess the works in progress and to discuss new themes and further studies to be promoted and developed. The French ICF Collaborating Centre is involved in every thematic group. In 2008 the most active groups have been those dealing with ICF training, with using the ICF in medical expertise, for sick leaves and oro-facial pain descriptions and assessments.

- Training is a major concern that is why a group has been set up, made of 7 French, Belgian and Swiss special education, social work, health and health-related vocational national schools and one NGO (Handicap International). Introductory, advanced and training for trainers sessions and corresponding educational material have been developed. The needs for ICF training are continuously increasing since the legislations related to disability in European countries have particularly evolved, following the UN and European Commission recommendations.

One working group is focused on the use of the ICF in medical expertise in legal cases. It is coordinated by Dr Freddy Falez (Bruxelles Free University, member of the EUMASS) in collaboration with the Department of Medical Ethics (Medical School, Paris 5 University), Belgian, Canadian and French insurance and social security medical experts, French occupational therapists, lawyers and DPO's representatives in the field of brain injury. Their work focuses on proposals for the introduction of the ICF approach and dimensions of participation and environmental factors in the legal assessment procedures of injuries for compensation.

Another group, led by Dr. L. Letrilliart (Lyon Medical School), has initiated a Belgian-French study on sick leaves assessment. Based on 400 sick leaves prescribed by general practitioners, the study intends to identify the factors taken into account by GPs, with the use of an adapted ICF checklist. The data are currently being collected, results and publication are expected in 2009.

Coordinated by Dr P. De Jaegher (Paris 5 University, Dental Sciences School), one group of dentists works at mapping oral health quality of life instruments to the ICF, using the linking rules published by Cieza et al¹. Publication in a scientific journal is intended in 2009. Two members of this group attended an ICF Core sets workshop organised by the German ICF Research Branch (Munich, February 2008) in relation with one of their other aim, i.e. to develop an ICF Core set for oro-facial pain. To support these works, a French bibliographic watch on publications

bibliographic watch on publications and events related to the ICF and its use is being done.

Beyond the French-speaking region, the Collaborating Centre for the ICF in French is very keen to connect with a larger forthcoming European network. In conclusion, the French
Collaborating Centre is pleased to
announce that the French version of
the ICF-Children and Youth version is
forthcoming December 2008. -The
Classification Internationale du
Fonctionnement, du handicap et de la
santé, version pour enfants et
adolescents (CIF-EA)- is the result of a
collaborative effort of Belgian,
Canadian, French, and Swiss children
and youth specialists and the WHO
Collaborating Centre for ICF in
French.

For information:

Catherine Barral, email: c.barral@ctnerhi.com.fr Marie Cuenot, email: m.cuenot@ctnerhi.com.fr

Website: http://www.ccoms-fci-cif.fr

Latin America

WHO Collaborating Centre for the FIC in Mexico (CEMECE)

The year 2008 is very special for us, because CEMECE has been designated as a Collaborating Centre for the WHO-FIC on January 28, 2008. The aim of this article is to present the main features of the CEMECE and its activities in Mexico and Latin America.

The CEMECE (formerly denominated Mexican Center for the Classification of Diseases) was created by the Secretariat of Health in 1985 in the General Direction of Epidemiology (DGE); in 1997 it was transferred to the General Direction of Statistics and Informatics, presently the General Direction of Health Information (DGIS), that has to integrate the national statistics of health relative to resources, services and reasons for medical attention. Like the National Institute of Statistics, Geography and Informatics (INEGI), the office in charge of the information on vital statistics, DGIS processes information on mortality data coming from death certificates, especially to support the monitoring epidemiologist. Since the codification of diseases. medical causes of death and procedures is necessary for the generation and integration of health

¹ Cieza A. et al. (2002). Linking health-status measurements to the ICF, *Journal of Rehabilitation Medicine*, 34:205-210. Cieza A. et al. (2005). ICF linking rules: an update based on lessons learned, *Journal of Rehabilitation Medicine*, 37:212-218.

statistics, DGIS coordinates the work of CEMECE, but their members not only include personnel of DGIS, but belong also to the most important institutions of the public and private National System of Health and INEGI. CEMECE has work groups, specialized in the handling of classifications, mainly the International Classification of Diseases (ICD), the Classification of Oncology (ICD-O), the Classification of Procedures in Medicine (of the ICD-9-CM) and the Classification of Functioning, Disability and Health (ICF). From its creation, the CEMECE has developed the following functions:

- Training formation and update of national and foreign coders and instructors.
- Coordination in collaboration with the institutions of the National System of Health, INEGI, Pan American Health Organization (PAHO), World Health Organization (WHO), Ministries of Health and Offices of Statistics of other countries, CEMECE updates and distributes translations of international classifications, settles down agreements for their use and solves codification problems
- Consultancy to users of the international classifications and the statistics of morbidity, mortality, procedures in medicine and functioning.
- Research focused to problems that affect the quality of information such as the registry, coding, coverage, etc. Every year the Center gives advanced training courses to an average of 250 to 300 national coders and, for 7 years it has been imparted a course for the training of 30 to 35 instructors in codification of medical information (national and foreign).

CEMECE also collaborates with INEGI to improve the quality of the official statistics of mortality in charge of that institution. The greater contributions are in the improvement of the coverage of deaths of children of less than 5 years of age, and in the deliberate search and classification of the maternal deaths in the country at large, the measurement of the effects of the registry and the codification in

the statistics of morbidity and mortality and in the effects of the changes between the revisions of ICD and in the consultant's office in the automated codification of mortality.

With the object to decentralize the training in codification of medical information, CEMECE has promoted the creation of regional centers of training in the country. The centers of the state of Jalisco, the state of Mexico and the Federal District, have helped CEMECE to satisfy the demand of training of the coders.

After the launch of the ICF, the Center has contributed in the diffusion of the knowledge and use of this classification. In Mexico a Promotional Network of ICF with representatives of the institutions of health created a strategy for its diffusion and implementation. A training model was developed, enriched with international experiences and the advance of knowledge and use of ICF in the world.

CEMECE promotes that trainers in other countries create similar national centers for international classifications. We recommend that these national centers will be integrated with members of every national health institution (public and private) and the national statistics office/institute. Keys points for the CEMECE:

- to consolidate the roll of the CEMECE as WHO- Collaborating Center for FIC;
- to obtain an initial diagnosis of needs for training in the region, especially in countries with more problems in coverage, quality and use of health classifications;
- to attain closer links between national efforts and international initiatives
- to maintain an active network of collaboration between countries.
 Finally CEMECE confirms its commitment to offer training and coaching related to the utilization of international health classifications in Latin America.

For information:

Luis Manuel Torres Imtorres@salud.gob.mx Patricia Nilda Soliz cif@salud.gob.mx http://cemece.salud.gob.mx/index.html

Latin American and Caribbean Network for the promotion of ICF

After the launch of ICF in May 2001, several countries of Latin America started to work in order to accomplish the resolution 54.21. Initial efforts were focused on the development of training materials, on the development of a "training of trainers" strategy and on the searching and analyses of international experiences related to the ICF implementation.

Supported by the National Institute of Mental Health, Pan American Health Organization and the national Ministry of Health, in February 2003 Mexico was the venue for the annual meeting of the ICF Iberoamerican Network. In this meeting, advances on the implementation of ICF were presented and discussed. Additionally, a Program of Work, focused on training, diffusion, research and application, was established.

One year alter, in November 2004, another meeting was performed in Washington to check the advances on the planned activities, to share national experiences and to strengthen the communication between the stakeholders and to keep the network alive.

- Several centres and national networks have been created to be responsible for the dissemination, training and exchange between different countries.
- Material for training and application of ICF were developed.
- ICF has been included in the program of training for Physical rehabilitation specialist and in other programs of medical specialization of some Latin American universities

ICF has been applied in

- 1. Population surveys: Nicaragua 2003, Chile 2004, México 2002, Panamá 2006.
- 2. Disability people certification: Argentina, Nicaragua and Panamá.
- 3. Disability people register: Colombia and México.
- 4. Clinical settings: Venezuela and Cuba.
- 5. Labour health: Colombia, Uruguay and México.

In April 2008, Mexico was the venue for the meeting of the Latin American and Caribbean Network for the promotion of ICF. The main activities in this meeting were the presentation of national reports about ICF implementation, the analyses and discussion of a paper about disability in the region, a presentation of a model for training and a review of the emergent demands in the field of ICF implementation.

The terms of reference for the organization, functioning and work of the network are currently being reviewed.

Participating countries in the Network are Argentina, Brazil (WHO Collaborating Centre for the FIC in Portuguese), Colombia, Cuba, Chile, Mexico and Venezuela. The Network is supported by the Pan American Health Organization.

To attain a higher involvement of the countries with the network, a 2009 meeting in Brazil, has been planned. The objectives of this meeting are to learn of the successful experiences in the region, to review the collaborative strategies between countries and to identify the needs for training and coaching.

The development of international courses for ICF trainers is being discussed. There is a chance of start with this course in 2009 in Mexico. Future Activities:

- To continue with the ICF Dissemination and Training Programmes in the countries of the region that have already begun with the implementation of ICF.
- To start the development of diffusion and training programmes in the countries of the region that have not still begun with the implementation of ICF.
- To obtain the license for printing ICF books and for reproducing cds. To increase the resources for distributing books and cds in the region.
- To continue with the development of instruments for different applications of ICF.
- To strength the "Training of Trainers" strategy. Conclusions:

- It is necessary to learn from successful experiences from other countries
- It is important to attain closer links between national efforts and international initiatives.
- It is necessary to maintain an active network of collaboration between countries.

The CEMECE confirms its commitment to offer training and coaching related to the utilization of international health classifications in the region and to encourage the activities of the network to obtain more and better evidences to apply the ICF.

For information:

Patricia Nilda Soliz Email: cif@salud.gob.mx http://cemece.salud.gob.mx/index.html

The Netherlands

The Capacity Profile (CAP)

A method to assess additional care needs in children with neurodevelopmental disabilities.¹

Children with developmental disabilities often show a variety of associated impairments that lead to a lifelong need for additional care. Careful assessment of these impairments is required not only for diagnostic purposes but also to inform the parents and others, like service providers, about the expected additional care needs in the future. This additional care differs from the care which is considered usual for the child's age, as it is indicated by the impairments. We hypothesized that this expected additional care should be stable in time in stable disorders, like cerebral palsy (CP), spina bifida or other neurodevelopmental and congenital disorders, provided optimal treatment and environmental factors. We systematically reviewed the literature to identify instruments that classify comprehensively the type and amount of expected additional care needs in the future for the individual child with a non-progressive, permanent medical condition. However, no such instruments were found.² This motivated us to develop the Capacity Profile (CAP).³ The CAP has been developed based on clinical experience in the field of paediatric rehabilitation. The CAP enables us to assess the expected additional care (see Appendix) and fits into the framework of the International Classification of Functioning, Disability, and Health (ICF),⁴ which classifies human functioning in relation to a health condition in terms of 1) body functions and body structures, 2) activities and participation, and 3) contextual (e.g., environmental and personal) factors. The CAP is a standardized method to assess the need for additional care indicated by a child's impairments in five domains of body functions: physical health (b 280-299, b410-b499, b510-599, b610-639),, neuromusculoskeletal and movementrelated (b710-799), sensory (b210-279), mental (b 110-199), and voice and speech functions (b310-b399). Impairments in body functions in ongoing chronic conditions lead to limitation of the capacities of the individual which result in need for additional care. Additional care is categorized in the ICF under the heading of environmental factors. Rehabilitation treatment aims to optimize the performance of activities and participation. In case of ongoing stable conditions the kind of the optimal environmental factors is assumed to be predictable. So, we definded the level of need for care in each domain from 0 (no need for additional care) to 5 (needs help with every activity). Professional assessment of the level of need for additional care in each of the five domains, irrespective of the need for care in the other domains, results in the Capacity Profile for the individual child. By scoring the dependence on

additional care for each domain

regarding the contribution of additional

care to the various domains of body

functions. We investigated interrater

agreement ³, construct validity ⁵ and

excellent. It was concluded that the

assessing the additional needs of a

CAP is a reliable instrument for

child with a non-progressive,

stability over time ³. All were good to

separately, insight is obtained

permanent neurodevelopmental related disability

Despite the fact that further research needs to be done, there is already much interest among rehabilitation professionals and service providers to implement the CAP. Recently a project to investigate the potential of the CAP to simplify and accelerate the application procedure for indicating services has received a grant. This project to establish the added value of the CAP and accordingly to promote the implementation of the CAP for service delivery will start this year.

Reference List

- (1) Meester-Delver A. The Capacity Profile: A method to classify additional care needs in children with neurodevelopmental disabilities. Thesis; University of Amsterdam; 2008.
 (2) Meester-Delver A, Beelen A, Hennekam R, Hadders-Algra M, Nollet F. Predicting additional care in young children with neurodevelopmental disability: a systematic literature review. Dev Med Child Neurol 2006; 48(2):143-150.
- (3) Meester-Delver A, Beelen A, Hennekam R, Nollet F, Hadders-Algra M. The Capacity Profile: a method to classify additional care needs in children with neurodevelopmental disabilities. Dev Med Child Neurol 2007; 49(5):355-360.
 (4) World Health Organization.
 International Classification of Functioning, Disability and Health. World Health Organization, editor. 2001. Geneva.
 (5) Meester-Delver A, Beelen A, Ketelaar M., Hadders-Algra M, Nollet F, Gorter JW. Validation of the Capacity Profile in preschool children with cerebral palsy. Dev Med Child Neurol. In press 2008.

For information:

Anke Meester – Delver, MD, PhD e-mail: a.meester@amc.uva.nl

ICD-10 Implementation Project in the Netherlands

A project is underway for the implementation of ICD-10 in Dutch hospital Electronic Health Care Records by January 2011. The aim of the complete project is to support the development of a registration system that serves many purposes. The registration system will be based on a once-only-many uses of health data principle. The ICD-10 is one of the

basic elements for this system, for reasons such as:

- The national DBC system will be based on ICD-10.
- The national hospital care information (LZi) will be based on ICD-10.
- ICD-10 is a standard terminology, which will improve univocal language and transparency in health care.
- ICD-10 will be mandatory for reporting health care data on a European level.
- ICD-10 is in use in all surrounding countries and will therefore improve international cooperation and interoperability.

In a kick-off conference in July 2008 a nationwide support was demonstrated by all parties concerned.

At this moment the work on a project plan has almost been completed for the period 2009-2010. On behalf of the Ministry of Health, the Dutch Collaborating Centre is commissioning and leading the ICD-10 project. Prismant, Health Care and Advice Institute, a Dutch research and advisory agency, has been commissioned by the Centre to coordinate the project.

The project plan will focus on two main subjects; 1. The availability and maintenance of all supporting material for the implementation of ICD-10, such as books, electronic files. browsers and ICD-9-CM to ICD-10 conversion, and 2. The availability of ICD-10 trained administrative clerks, coders, training material, coding support (e.g. helpdesk, extra hands and advice). An ICD-10 Platform will be in place to coordinate maintenance and knowledge dissemination within a national network and active participation within the WHO-FIC Network.

For information:

Huib Ten Napel

Email: huib.ten.napel@rivm.nl

ICF References

2540 Abberly P

Counting us out: A discussion of the OPCS disability surveys Disab, Handicap & Society 7(2), 139-155, 1992

2541 Altma BM, Madans J, Rasch E

Using the ICF as a Framework for Washington Group Measures. Presentation at the 5th meeting of the Washington Group, Rio de Janeiro 2005

2424 Arinzon Z, Gepstein R, Shabat S c.s.

Pain perception during the rehabilitation phase following traumatic hip fracture in the elderly is an important prognostic factor and treatment tool

Disab and Rehab 29(8), 651-658, 2007

2497 Badlev EM

Enhancing the conceptual clarity of the activity and participation components of the ICF Soc Science & Medicine 66, 2335-2345, 2008

2542 Bajekal M, Harries T, Breman R c.s.

Review of Disability Estimates and Definitions In-House Report 128, Department for Work and Pensions, UK 2004

2528 Bartlett DJ, MacNab J c.s.

Advancing rehabilitation research: an interactionist perspective to guide question and design

Disab and Rehab 28(19), 1169-1176, 2006

2452 Blécourt ACE c.s.

Preliminary evaluation of a multidisciplinary pain management program for children and adolescents with chronic musculoskeletal pain Disab and Rehab 30(1), 13-20, 2008

2527 Boonen A, Rasker JJ, Stucki G

The international classification for functioning, disability and health Clin Rheumatol 2, 1803-1808, 2007

2535 Borell-Carrio F, Suchman A, Epstein R

The Biopsychosocial Model 25 Years later: Principles, Practice and Scientific Inquiry Annals of Family Medicine 2(6), 576-582, 2004

2526 Brage S, Donceel P, Falez F

Development of ICF core set for disability evaluation in social security Disab and Rehab 30(18), 1392-1396, 2008

2518 Brooks R, Rabin R, De Charro F

The measurement and valuation of health status using the EQ-5D: A European perspective Dordrecht, 2003

2543 Cambois E, Robine J-M, Romieu I

The influence of functional limitations and various demographic factors on self-reported activity restriction at older ages Disab and Rehab 27(5), 871-883, 2005

2494 Collado V, Faulks D, Hennequin M

A survey of the difficulties encountered during routine hygiene and health care by persons with special needs

Disab and Rehab 30(14), 1047-1054, 2008

2503 Corrigan R, McBurney H

Community ambulation: Influences on therapists and clients reasoning and decision making

Disab and Rehab 30(15), 1079-1087, 2008

2473 Coster W, Alunkal Khetani M

Measuring participation of children with disabilities: Issues and challenges Disab and Rehab 30(8), 639-648, 2008

2439 Cott CA, Wiles R, Devitt R

Continuity, transition and participation: Preparing clients for life in the community poststroke

Disab and Rehab 29(20-21), 1566-1574, 2007

2470 Demir SO, Koseoglu F

Factors associated with health-related quality of life in patients with severe Guillain-Barré syndrome

Disab and Rehab 30(8), 593-599, 2008

2457 Dixon D, Johnston M

Cognitive representations of disability behaviors in people with mobility limitations: Consistency with theoretical constructs Disab and Rehab 30(2), 126-133, 2008

2489 Duggan CH, Albright KJ, Lequerica

Using the ICF code and analysis women's disability narratives
Disab and Rehab 30(12-13), 978-990, 2008

Disab and Renab 50(12-15), 776-770, 2000

2478 Eide AH, Jelsma J, Loeb M c.s.

Exploring ICF components in a survey among Xhosa speakers in Eastern & Western Cape, South Africa

Disab and Rehab 30(11), 819-829, 2008

2475 Eijken M van, Melis R, Wensing M c.s.

Feasibility of a new community-based geriatric intervention program: An exploration of experiences of GPs, nurses, geriatricians, patients and caregivers
Disab and Rehab 30(9), 696-708, 2008

20(2), 090 700, 200

2469 Finch L, Higgins J c.s.

Development of a measure of functioning for stroke recovery: The functional recovery measure

Disab and Rehab 30(8), 577-592, 2008

2509 Foster C, Hillsdon M, Thorogood M

Environmental perceptions and walking in English adults

J Epid Community Health 58, 924-928, 2004

2500 Fougeurollas P, Noreau L, Lepage C Assessment of Life Habits. For children from

birth to 4 years of age Quebec 21, 2007

2498 Fougeyrollas P, Cloutier R c.s.

The Quebec Classification: Disability Creation Process

Quebec 162, 1999

2499 Fougeyrollas P, Noreau L

Assessment of Life Habits. General Short Form Quebec 22, ed. 2003

2506 Fougeyrollas P, Noreau L, Boschen KA

Interaction of environment with individual characteristics and social participation:

Theoretical perspectives and applications in persons with spinal cord injury Topics Spinal Cord Injury Rehabil 7(3), 1-16, 2002

2501 Fougeyrollas P, Noreau L, Lepage C

Assessment of Life Habits. Adapted for children 5 to 13 years, Quebec 21, ed. 2003

2446 Gibson N, Kerr Graham H, Love S

Botulinum toxin A in the management of focal muscle overactivity in children with cerebral palsy

Disab and Rehab 29(23), 1813-1822, 2007

2445 Gracies JM, Singer BJ, Dunne JW

The role of botulinum toxin injections in the management of muscle overactivity of the lower limb

Disab and Rehab 29(23), 1789-1805, 2007

2466 Gray DB, Hollingsworth HH c.s.

A subjective measure of environmental facilitators and barriers to participation for people with mobility limitations
Disab and Rehab 30(6), 434-457, 2008

2488 Guptill C

Musicians' health: Applying the ICF framework in research

Disab and Rehab 30(12-13), 970-977, 2008

2522 Gustafsson U, Grahn B

Validation of the General Motor Function Assessment Scale - An instrument for the elderly

Disab and Rehab 30(16), 1177-1184, 2008

2441 Gzil F, Lefeve C, Pachoud B c.s.

Why is rehabilitation not yet fully personcentered and should it be more person-centered? Disab and Rehab 29(20-21), 1616-1624, 2007

2471 Haak T, Scott B

The effect of Qigong on Fibromyalgia (FMS): A controlled randomized study Disab and Rehab 30(8), 625-633, 2008

2459 Hallberg LRM, Hallberg U, Kramer SE

Self-reported hearing difficulties, communication strategies and psychological general well-being (quality of life) in patients with acquired hearing impairment Disab and Rehab 30(3), 203-212, 2008

2532 Hammell K

Deviating from the norm: a skeptical interrogation of the classificatory practices of the ICF British J of Occupat Ther 67, 408-411, 2004

2426 Harris F

Conceptual issues in the measurement of participation among wheel mobility device users

Disab and Rehab: assistive technology 2(3), 137-148, 2007

2423 Hartman-Maeir A, Soroker N c.s.

Activities, participation and satisfaction oneyear post stroke

Disab and Rehab 29(7), 559-566, 2007

2451 Heerkens YF

Het verstrekken van hulpmiddelen Issue 1, 12, 2008

2502 Heerkens YF, Koolhaas C

ICF voor de logopedie Issue 3, 4, 2008

2416 Heerkens YF, Ravensberg CD van

Toepassingsmogelijkheden van de multiprofessionele ICF in de paramedische zorg Amersfoort 2007

2450 Heuvel S van den

Kernset van meetinstrumenten essentieel bij effectonderzoek en in de praktijk Issue 1, 10-11, 2008

2448 Hoenderdaal P

HBSH: observatie van activiteiten Revalidata 29(2007)140, 10, 2007

2427 Hoenig H, Giacobbi P, Levy CE

Methodological challenges confronting researchers of wheeled mobility aids and other assistive technologies

Disab and Rehab: assistive technology 2(3), 159-168, 2007

2485 Howard D, Nieuwenhuijsen ER c.s.

Health promotion and education: Application of the ICF in the US and Canada using an ecological perspective Disab and Rehab 30(12-13), 942-954, 2008

2510 Humpel N, Owen N, Iverson D c.s.

Perceived environment attributes, residential location, and walking for particular purposes Am J Prevent Med 26, 119-125, 2004

2507 Humpel N, Owen N, Leslie E

Environmental factors associated with adults' participation in physical activity. A Review. Am J Prevent Med 22, 188-199, 2002

2453 Hunt MA, Birmingham TB c.s.

Towards a biopsychosocial framework of osteoarthritis of the knee Disab and Rehab 30(1), 54-61, 2008

2442 Ibragimova N, Lillvist A, Pless M c.s.

The utility of ICF for describing interaction in non-speaking children with disabilities - caregiver ratings and perceptions
Disab and Rehab 29(22), 1689-1700, 2007

2529 Imrie R

Demystifying disability: a review of the ICF Sociology of Health & Illness 26, 287-305, 2004

2447 Itzkovich M et al.

SCIM-spinal cord independence measure Disab and Rehab 29(24), 1932-1933, 2007

2516 Iwarsson S

Environmental influences on the cumulative structure of instrumental ADL: An example in osteoporosis patients in a Swedish rural district Clin Rehabil 12, 221-227, 1998

2515 Iwarsson S, Isaccson A

On scaling methodology and environmental influences in disability assessments: The cumulative structure of personal and instrumental ADL

Can J Occupat Ther 64, 240-251, 1997

2521 Jelsma J, Brauer N, Hahn C c.s.

A pilot study to investigate the use of the ICF in documenting levels of function and disability in people living wit HIV

SA J Physiother 62, 7-13, 2006

2504 Jelsma J, Maart S, Eide A c.s.

Who gets the disability grant in South Africa? An analysis of the characteristics of recipients in urban and rural areas

Disab and Rehab 30(15), 1139-1145, 2008

2444 Jette A, Tao W, Haley SM

Blending activity and participation sub-domains of the ICF

Disab and Rehab 29(22), 1742-1750, 2007

2487 Jette AM, Norweg A, Haley SM

Achieving meaningful measurements with ICF

Disab and Rehab 30(12-13), 963-969, 2008

2429 Johnston M, Bonetti D, Joice S c.s.

Recovery from disability after stroke as a target for a behavioral intervention: Results of a randomized controlled trial Disab and Rehab 29(14), 1117-1127, 2007

2523 Jones D, Rochester L, Birleson A c.s.

Everyday walking with Parkinson's disease Disab and Rehab 30(16), 1213-1221, 2008

2482 Jones GC, Sinclair LB

Multiple health disparities among minority adults with mobility limitations: An application of the ICF framework and codes Disab and Rehab 30(12-13), 901-915, 2008

2530 Jonsson G, Ekhom J, Schult ML

The ICF environmental factors as facilitators or barriers used in describing personal and social International J of Rehabilitation Research 31, 119-129, 2008

2435 Kersten P. Cardol M. George S c.s.

Validity of the impact on participation and autonomy questionnaire: A comparison between two countries

Disab and Rehab 29(19), 1502-1509, 2007

2433 Larsson Lund M, Nordlund A c.s.

Perceived participation and problems in participation are determinants of life satisfaction in people with spinal cord injury Disab and Rehab 29(18), 1417-1422, 2007

2438 Leplege A, Gzil F, Cammelli M c.s.

Person-centeredness: Conceptual and historical perspectives

Disab and Rehab 29(20-21), 1555-1565, 2007

2432 Lidal IB, Huynh TK c.s.

Return to work following spinal cord injury: a review

Disab and Rehab 29(17), 1341-1375, 2007

2514 Lockett D, Willis A, Edwards N

Through senior's eyes: An exploratory qualitative study to identify environmental barriers to and facilitators of walking Can J Nurs Res 37(3), 48-65, 2005

2534 Lutz B, Bowers B

Understanding how disability is defined and conceptualized in the literature Rehabilitation Nursing 28, 74-78, 2003

2440 MacLeod R, McPherson KM

Care and compassion: Part of person-centered rehabilitation, inappropriate response or a forgotten art?

Disab and Rehab 29(20-21), 1589-1595, 2007

2545 Madans J

Proposed content for census questions for international use. Presentation to 4th Washington Group meeting, Bangkok, Thailand, 2004

2505 Maini M, Nocentini U, Prevedini A c.s.

An Italian experience in the ICF implementation in rehabilitation: Preliminary theoretical and practical considerations Disab and Rehab 30(15), 1146-1152, 2008

2454 Martinuzzi A, Frare M, Pradal M c.s.

Disseminating the WHO ICF in the Veneto Region of Italy Disab and Rehab 30(1), 71-80, 2008

2524 Masala C, Petretto DR

From disablement to enablement: Conceptual models of disability in the 20th century Disab and Rehab 30(17), 1233-1244, 2008

2434 McIntyre A, Tempest S

Two steps forward, one step back? A commentary on the disease-specific core sets of the ICF

Disab and Rehab 29(18), 1475-1479, 2007

2531 McManus V, Michelsen S c.s.

Discussion groups with parents of children with cerebral palsy in Europe designed to assist development of a relevant measure of environment

Child Care, Health and Development 32, 185-192, 2008

2437 McPherson KM, Siegert RJ

Person-centered rehabilitation: Rhetoric or reality?

Disab and Rehab 29(20-21), 1551-1554, 2007

2463 Meeteren J van, Roebroeck ME, Celen E, Donkervoort M, Stam HJ

Functional activities of the upper extremity of young adults with cerebral palsy: A limiting factor for participation?

Disab and Rehab 30(5), 387-395, 2008

2461 Meij WKN van der, Wever D

ICF: fit for use?

Revalidata 30(2008)141, 30-32, 2008

2547 Meltzer H

General measures of health for use in Health Interview surveys and Censuses: The UK Experience, 2003

2519 Mkoka S, Jelsma J, Vaughan J

The pitfalls of translation SA Med J 93, 265-266

2462 Mortenson WB, Miller WC c.s.

Measuring wheelchair intervention outcomes Disab and Rehab 2(5), 275-285, 2007

2428 Murphy SL, Gretebeck KA c.s.

The bath environment, the bathing task and the older adult: A review and future directions for bathing disability research Disab and Rehab 29(14), 1067-1075, 2007

2425 Napel H ten

Het recht van kinderen om te leven in een wereld zonder belemmeringen BOSK 4, 13, 2007

2477 Negrini S

Approach to scoliosis changed due to causes other than evidence: Patients call for conservative (rehabilitation) experts to join in team orthopedic surgeons Disab and Rehab 30(10), 731-741, 2008

2421 Oostendorp RAB

Over de horizon van de paramedische zorg ISBN 978-90-811504-1-5, 48 p, Nijmegen 2007

2508 Owen N, Humpel N, Leslie E c.s.

Understanding environmental influences on walking: Review and research agenda Am J Prevent Med 27, 67-76, 2004

2520 Paterson C

Seeking the patient's perspective: A qualitative assessment of EuroQol, COOP-WONCA charts and MY-MOP

Qual Life Res 13, 871-881, 2004

2422 Pennington L, Marshall J, Goldbart J

Describing participants in AAC research and their communicative environment: Guidelines for research and practice Disab and Rehab 29(7), 521-535, 2007

2480 Pieterse AJ, Cup EHC, Knuijt S c.s.

Development of a tool to guide referral of patients with neuromuscular disorders to allied health services. Part two Disab and Rehab 30(11), 863-870, 2008

2479 Pieterse AJ, Cup EHC, Knuijt S c.s.

Development of a tool to guide referral of patients with neuromuscular disorders to allied health services. Part one

Disab and Rehab 30(11), 855-862, 2008

2418 Port IGL

Predicting outcome in patients with chronic stroke: finding of a 3-year follow-up study, proefschrift, Utrecht 2006

2476 Provezano Barbosa A, Vaz DV c.s.

Therapeutic effects of electrical stimulation on manual function of children with cerebral palsy: Evaluation of two cases

Disab and Rehab 30(9), 723-728, 2008

2443 Raman SR, Boyce W, Pickett W

Injury among 1107 Canadian students with selfidentified diabilities

Disab and Rehab 29(22), 1727-1735, 2007

2484 Reed G, Dilfer K, Bufka LF c.s.

Three model curricula for teaching clinicians to use the ICF

Disab and Rehab 30(12-13), 927-941, 2008

2436 Riis V, Verrrier MC

Outpatient spinal cord injury rehabilitation: Managing costs and funding in a changing health care environment Disab and Rehab 29(19), 1525-1534, 2007

2536 Rosenbaum P, Stewart D

The WHO ICF: A Model to guide Clinical Thinking, Practice and Research Seminars in Public Neurology 1, 5-10, 2004

2468 Samuelsson K, Wressle E

User satisfaction with mobility assistive devices: An important element in the rehabilitation process
Disab and Rehab 30(7), 551-558, 2008

2525 Sanderson K, Nicholson J c.s.

Mental health in the workplace: Using the ICF to model the prospective associations between symptoms, activities, participation and environmental factors

Disab and Rehab 30(17), 1289-1297, 2008

2417 Schepers VPM

Clinimetrics & determinants of outcome after stroke

proefschrift, ISBN-10 90-393-4399-3/ISBN-13 978-90-393-4399-9, Utrecht 2006

2458 Scherer MJ, Dicowden MA

Organizing future research and intervention efforts on the impact and effects of gender differences on disability and rehabilitation: The usefulness of the ICF

Disab and Rehab 30(3), 161-165, 2008

2483 Schraner I, Jonge D de, Layton N c.s.

Using the ICF in economic analyses of Assistive Technology systems: Methodological implications of a user standpoint Disab and Rehab 30(12-13), 916-926, 2008

2513 Shumway-Cook A, Patla A c.s.

Assessing environmentally determined mobility disability: Self-Report versus observed community mobility
J Am Geriatr Soc 53, 700-704, 2005

2431 Slebus FG, Sluiter JK c.s.

Work-ability evaluation: A piece of cake or a hard nut to crack?

Disab and Rehab 29(16), 1295-1300, 2007

2420 Smedby B, Schiøler G

Health Classifications in the Nordic Countries Kopenhagen, 110 p, 2006

2464 Smith DM, Brown SL, Ubel PA

Mispredictions and misrecollections: Challenges for subjective outcome measurement Disab and Rehab 30(6), 418-424, 2008

2456 Soberg HL, Sandvik L, Ostensjo S

Reliability and applicability of the ICF in coding problems, resources and goals of persons with multiple injuries

Disab and Rehab 30(2), 98-106, 2008

2419 Stallinga HA, Napel H ten, Jansen GJ

Inhoudsvalidering van functioneringsproblemen van CVA-patiënten in relatie tot de ICF Verpleegkunde 22(1), 31-45, 2007

2474 Stineman MG, Kurz AE, Kelleher D, Kennedy BL

The patient's view of recovery: An emerging tool for empowerment through self-knowledge Disab and Rehab 30(9), 679-688, 2008

2430 Stineman MG, Ross RN c.s.

Population-based study of home accessibility features and the activities of daily living: Clinical and policy implications
Disab and Rehab 29(15), 1165-1175, 2007

2481 Stone J

Guest Editor's Introduction and Overview Disab and Rehab 30(12-13), 899-900, 2008

2495 Stucki G, Reinhardt JD, Cieza A c.s.

Developing Swiss Paraplegic Research: Building a research institution from the comprehensive perspective Disab and Rehab 30(14), 1063-1078, 2008

2486 Sundar V, Daumen ME, Conley DJ c.s.

The use of ICF codes for information retrieval in rehabilitation research: An empirical study Disab and Rehab 30(12-13), 955-962, 2008

2537 Threats T

Towards an international framework for communication disorders: Use of the ICF J of Communic Disorders 39, 251-265, 2006

2538 Threats T, Worrall L

Classifying communication disability using the ICF

Advances in Speech-Language Pathology 6, 53-62, 2004

2490 Vanleit B

Using the ICF to address needs of people with disabilities in international development: Cambodian case study
Disab and Rehab 30(12-13), 991-998, 2008

2467 Velozo CA, Wang Y, Lehman L, c.s.

Utilizing Rasch measurement models to develop a computer adaptive self-report of walking, climbing, and running Disab and Rehab 30(6), 458-467, 2008

2472 Videler AJ, Beelen A, Nollet F

Manual dexterity and related functional limitations in Hereditary Motor and Sensory Neuropathy. An explorative study. Disab and Rehab 30(8), 634-638, 2008

2492 Voelter-Mahlknechts S c.s.

Sociomedicinal aspects of vibration-induced white finger disease Disab and Rehab 30(14), 999-1013, 2008

2533 Vrkljan B

Dispelling the disability stereotype: Embrasing a universalistic perspective of disablement Canadian J of Occupational Therapy 72(1), 57-59, 2005

2512 Whiteneck GG, Gerhart KA c.s.

Identifying environmental factors that influence the outcomes of people with traumatic brain injury

J Head Trauma Rehabil 19, 191-204, 2004

2511 Whiteneck GG, Harrison-Felix CL c.s.

Quantifying environmental factors: A measure of physical, attitudinal, service, productivity ans policy barriers

Arch Phys Med Rehabil 85, 1324-1335, 2004

2449 Wynia K

The Multiple Sclerosis Impact Profile (MSIP) Proefschrift, ISBN 978-90-77113-64-6, Groningen 2008

2460 Wynia K, Middel B, Dijk JP van c.s.

The Multiple Sclerosis Impact Profile (MSIP). Development and testing psychometric properties of an ICF-based health measure Disab and Rehab 30(4), 261-274, 2008

2493 Wynia K, Middel B, Ruiter H de c.s.

Stability and relative validity of the Multiple Sclerosis Impact Profile (MSIP) Disab and Rehab 30(14), 1027-1038, 2008

2465 Yorkston KM, Baylor CB, Dietz J c.s.

Developing a scale of communicative participation: A cognitive interviewing study Disab and Rehab 30(6), 425-433, 2008

2455 Yorkston KM, Kuehn CM c.s.

Measuring participation in people living with multiple sclerosis: A comparison of selfreported frequency, importance and selfefficacy

Disab and Rehab 30(2), 88-97, 2008