WHO-FIC Network meeting

Cologne, 19-25 October 2003

This third Newsletter is mainly dedicated to the meeting of WHO with WHO-FIC Collaborating Centres, organized by the German and Dutch Centre. The papers and presentations are available at http://www.rivm.nl/who-fic/meeting.htm. The meeting report is in preparation.

Anticipating to the precise wording of the decisions, e.g. recommendations to WHO Head Quarters, it must be said in general that the Family of International Classifications is expanding. Obviously there was the mutual wish of WHO and Centres to adopt five related classifications in areas of application where both reference classifications, ICD and ICF, will profit from such a closer relationship for different reasons.

The following classifications will be regarded as WHO-FIC related classifications:
- ICPC-2 for Primary Care/general practice coding. It is expected that WHO and Wonca will co-operate in the development of a WHO-FIC system, consisting of an ICD-PC Version (signs and symptoms etc.), an ICF-PC (functioning and disability), and an ICHI-PC (processes and procedures).
- ISO 9999 for assistive device coding (see the article of Theo Bougie, pp 3, 4), especially valuable for the ICF.
- ATC/DDD, Anatomical Therapeutic Chemicals classification system with Defined Daily Dose for international comparisons of drug utilization.
- ICHI, International Classification of Health Interventions, for countries that do not have a procedure classification.
- ICECI, International Classification of External Causes of Injury, for information on injuries and their circumstances.

One may ask what is a reference classification and what is a related classification? These concepts are defined in the protocol of the WHO Family of International Classifications that is still under discussion for a few minor (textual) problems. Hopefully it will be endorsed next year. Systems that structure terms are divided into two dimensions: relatedness and granularity. A matrix may illustrate the key concepts in the protocol.

<table>
<thead>
<tr>
<th>relatedness</th>
<th>granularity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference</td>
<td>Derived</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>coarse</td>
<td>intermediate</td>
</tr>
</tbody>
</table>

WHO reference classifications, such as ICD and ICF, are a product of national agreements. They have achieved broad acceptance and official agreement for use and are recommended as guidelines for international reporting on health. They may be used as models for the development or revision of other classifications, with respect to both the structure and the character and definition of the categories.
Editorial

Since our first newsletter in 2003 a lot of actions and meetings took place. One of the major events of course is the annual WHO-FIC network meeting 10-25 October 2003 in Cologne, Germany. Participants from Collaborating Centres from all over the world met and discussed 86 papers and 60 presentations, covering 98 different contributions, see http://www.rivm.nl/who-fic. Typical for this annual meeting is the acceptance of five classifications as related WHO-FIC-members as described in the front page and the left column.

In the committee meetings and plenary sessions the WHO-FIC committee structure, their terms of reference and their workplans have been discussed. One of the committees which changed its tasks is the WHO-FIC Implementation Committee (former ICD Implementation Committee). This committee is in charge with the continuation of the agreed ICD workplan and the development of a workplan for ICF. In the future the committee is expected to be in charge with the implementation of new WHO-FIC members as well. If you want to know more about the activities of this committee please address your question to one of the co-chairs marijke.de.kleijn@rivm.nl.

During the Cologne meeting Rune Simeonsson presented information concerning a draft ICF for children and youth. This draft version will be available from the WHO website for field trials with questionnaires at the beginning of January 2004.

During an informal get-together in Cologne with participants from European centres and representatives from other European countries such as Estonia and Hungary it was decided to explore possibilities for a European WHO-FIC cooperation. This seems to be necessary in order to improve the consistent use of WHO-FIC members in Europe and should fill the gap for countries not having a WHO-FIC centre. Interested readers are kindly invited to contact marijke.de.kleijn@rivm.nl.

An other important meeting was the annual NACC meeting on ICF in St. Louis June 17-19, 2003. Many interesting papers on the use of ICF were presented by North American participants and a few international representatives. For a short summary of the meeting see the paper presented by Diane Caulfield in Cologne (www.rivm.nl/who-fic/meeting.htm), as soon as the website with the papers is available we will mention it to you. NACC is also still producing a newsletter from the “NACC Clearinghouse ICF messages”, see http://www.cdc.gov/nchs/otherac/t/icd9/icfactivities.htm.

In the summer of 2003 a long expected special issue of the international journal Disability and Rehabilitation was published. “The International Classification of Functioning, Disability and Health (ICF): revision, content and use” contains contributions (14) prepared by several international experts from all over the world (volume 25, numbers 11-12, 3 June – 17 June 2003). For more information ask the guest editor: marijke.de.kleijn@rivm.nl.

In Australia the ICF Australian user guide version 1.0 is published last autumn. The guide is available at http://www.aihw.gov.au/publications/i ndex.cfm?type=detail&id=9329, and also in print. Content: overview of the ICF, benefits and uses of the ICF in Australia, several explanatory chapters on the ICF dimensions and ICF application examples.

Right before we printed this newsletter we received the Portuguese translation of the ICF which has been prepared by the University of Sao Paulo. For information: Regina Brandao, divulga@edu.usp.br.

This newsletter includes more WHO-FIC information concerning developments in international organizations as well as in some countries. Enjoy reading it and let us know if you want to share your information regarding one or more of the WHO-FIC members through our newsletter. We wish you a happy new year with a lot of interesting WHO-FIC experiences.
International Organizations

EUMASS

European Union of Medicine in Assurance and Social Security

On the XVth Congress, 10-12 of June 2004, Lille, of the European Union of Medicine in Assurance and Social Security (EUMASS) one of the main topics will be the ICF. Michael F. Schuntermann, Germany, will give a plenary lecture on ICF (June 10, 2004, 15:35 – 16:05 h), and he will chair a seminar on ICF Implementation, Projects, User Guidelines, Education/Training, Applications, Research, and Problems (June 11, 2004, 9:00 – 12:50 h).

The main objectives of the seminar are:
(1) to inform the participants about the activities with regard to the ICF in different European countries,
(2) to discuss these actions, and
(3) to implement some co-operations.

In the seminar, papers will be given by Dr. Marijke W de Kleijn - de Vrankrijker, The Netherlands, Dr. Seija Talo, Finland, Mrs. Catherine Barral, France, Dr. Elisabeth Nüchtern, Germany, Ms. Sonja Calais van Stokkom, Sweden, and Dr. Christiane Meyer-Bornsen, Austria. The list of speakers is not closed yet.

For ICF seminar information: Michael.Schuntermann@vdr.de
For congress information: www.eumass.com

ISO and Interbor

Interrelations between ICF and ISO9999 regarding the intended use of assistive technology

Changing disability policy
Disability policy is changing towards aiming to solve or avoid restrictions in activities and problems in social participation for persons belonging to the target group, persons with disabilities; both issues are derived straight on from the ICF concept.

Technology in general and more specifically assistive technology / devices may have an important function and may contribute to that central aim.

It would be of great value if the terminology connected to assistive technology should not only, not primarily focus on its contribution towards completion and restoration of body functions and structures. First of all the terminology should make clear how assistive technology contributes towards enabling human activities and restoring social participation in many areas of human life. On the other hand impairments of body functions and structures are – that is obvious in many cases where assistive technology is expected to contribute – characteristics of the target group, people with restrictions in activities and problems in participation due to impairments of body structures and functions. So all dimensions of ICF are relevant and should be connected to assistive technology.

That means that - in line of this modern policy approach - there is a clear need to connect all ICF dimensions and items from all the classifications as characteristics of assistive devices. This may be done through expressing the intended use of assistive technology in terms of its contribution related to human activities and social participation. The validation of using assistive devices may be derived from the product characteristic intended use.

In addition the term intended use is a key term in European legislation as it is an obligation for a European manufacturer to provide that information on a medical device in the framework of the Medical Devices Directive (MDD).

Two concrete projects to link ICF and ISO9999

Author is involved in two interlinked projects studying relationships between ICF and ISO9999 in order to use both classifications to express the intended use of assistive devices in an adequate terminology used with modern disability policy.

A first attempt has been finished by the international umbrella-organisation of orthopaedic workshops INTERBOR. It has developed a Nomenclature on Prostheses and Orthoses. This Nomenclature is classification based and starts from the ISO9999, Group 6, classification of prostheses and orthoses. The devices are specified in more functional details in added classification levels, up to three more levels. For this added specification the ICF classification of activities is used in the area of lower limb prostheses, while dedicated ISO standards are used for specifying functions of orthoses on a similar way. In addition for all prostheses and orthoses the field intended use is filled out for all product types both in free text and in the codes of ICF (mainly body functions for orthoses and mainly activities for prostheses). This enables parties to assess the person and express the needs for pro- or orthoses in terms and codes of the ICF, while the types of devices are also expressed in the same scope of terminology and classifications.

The next issue of the CD-ROM INTERBOR Nomenclature will be soon available in the English language. Interest parties may ask for an annual subscription. More information as well as some examples of the content is available from www.interbor.org.

A second project is based in the Netherlands and tries to develop a comprehensive classification of assistive devices based on ISO9999 and using the ICF for expressing the intended use of devices. The project is granted by the College voor Zorgverzekeringen (CvZ) and executed by a group of experts in direct exchange with the working field and steered by Nictiz (Nationale ICT Instituut voor de Zorg) and NEN (Dutch Standardisation Institute). The classification may be used for many purposes, as are:
– defining legislative arrangements on assistive technology in terms of the nowadays disability policy
– matching the analysed problem and needs of a person with the available typology of solutions
defining packages of types of assistive devices which may be provided and reimbursed
administration and registration of devices provided in the framework of social and health care
information systems and services regarding assistive technology for all parties involved.
Till now the priorities of this so-called CliQ-project (Classificatie Implementeer Qualiteit) were prostheses/orthoses and incontinence devices. For prostheses and orthoses the INTERBOR Nomenclature was transferred and implemented into the Dutch language and culture. At the end of 2003 the development for the domains pro- and orthoses and incontinence devices will be finished. The results will be available in Dutch for a wide public early in 2004.
In line of the results so far it is planned to continue with other domains during 2004.

Extension of ISO9999 with references to ICFS
At a more global level work is ongoing to design references between ICF and ISO9999. The working group WG10 – responsible for the 3rd Revision of ISO9999 - of ISO TC173/SC2 has adopted to its work programme to add links to ICF within ISO9999. That means that at any item in ISO9999 relevant ICF codes will be mentioned. This may be to the classifications of body structures, body functions, activities and participation. The references express – seen from ISO9999 – which are the obvious and main areas (of body functions / structures or activities / participation) where that particular assistive device is intended to be used for.

In an earlier stage of this new work it was planned to finish the task in line with the ongoing revision of ISO9999 in 2005. However now the work is ongoing, the workload and intensity is much clearer. This has lead to an adaptation of the planning, on which the WG10 has decided at its regular meeting on 20/21 November 2003 in Delft. The reference list will be prepared as a stand-alone document (Technical Report or Pre-norm) in the same time as planned. This gives the opportunity to launch this report as an isolated document for comment, not influencing the finalisation of the Revision process in the regular framework of ISO procedures.

For information
Theo Bougie M.Sc, BOUGIE Revalidatie Technologie, Postbox 156, NL-6100 AD ECHT, The Netherlands, Tel. +31-6-53 16 9913, theo.bougie@tref.nl, www.interbor.org

FIC around the World

Australia
Disability: the use of aids and the role of the environment
48 per cent of people with a disability used some form of aid in 1998, according to a new report released by the Australian Institute of Health and Welfare. Disability: the Use of Aids and the Role of the Environment is the first national report on the use of aids and equipment by people with disabilities and the status of other environmental factors important to people with disabilities. Environmental factors described in the report include use of aids and equipment, access to public transport, support arrangements in educational and workplace settings, assistance with daily activities, and home modifications.

AIHW spokesperson Samantha Bricknell said that aids and equipment had considerable importance for many people with disabilities because they ‘had the potential to improve lives by enabling greater independence and less reliance on personal assistance’. ‘Environmental factors are important because they can either greatly help or greatly hinder individuals’ participation in the economic and social world’, Dr Bricknell said.

According to the report, people with a physical or hearing disability were more likely to be users of aids compared with people with an intellectual, psychiatric, vision or speech disability. The average number of aids used by a person with a disability increased with severity of core activity restriction (core activities relate to self-care, mobility and/or communication). The variation was from an average of 1.2 aids for people with a mild core activity restriction to 3.5 aids for people with a profound core activity restriction. Medical aids were the most frequently used for people aged 15–64 years, followed by mobility aids. Children under 15 years mostly used medical, self-care and communication aids.

Dr Bricknell said that, of the environmental factors, the educational environment may be of particular importance for younger people with disabilities. ‘Over 70% of school-aged children with severe, moderate or mild core activity restrictions attended ordinary classes in 1998. For children with a profound core activity restriction (the highest level of restriction) the figure was 49%. ‘But our data also show that students with a disability attending primary or secondary school were more likely to be receiving support arrangements if in a special class or special school.’

Access to public transport was available to over 80% of people with a disability. However, approximately 21 per cent of people with a core activity restriction aged 5 to 64, and 26% aged over 65, could not use or only used some forms of public transport. Home modifications varied with age of the person with a disability. Ramps and other structural changes were more common for people under 30 years, and handgrab rails more common for the over-30s. Toilet, laundry and bath modifications were equally important to all age groups.

For information
Dr Samantha Bricknell, AIHW, e-mail: samantha.bricknell@aihw.gov.au phone: +61 (02) 6244 1138 http://www.aihw.gov.au/publications/index.cfm?type=detail&id=9187
Communication restrictions – the experience of people with a disability in the community

AIHW has recently released Disability Data Briefing 23: Communication restrictions – the experience of people with a disability in the community. This data briefing is available from the AIHW website free of charge. To access a pdf version of the briefing you have to copy and paste the following link into your web browser:


For information
Tim Beard, AIHW Functioning and Disability Unit,
e-mail: tim.beard@aihw.gov.au,
phone: +61 (02) 6244 1270

Germany

Application of the ICF to disability evaluation

The German pension funds which insure about 90% of the population are the main financiers of medical rehabilitation in Germany. They expect from clinicians in rehabilitation medicine to provide a disability evaluation on which they base their decisions to provide a pension or to focus on further vocational rehabilitation. Although there is no doubt that the ICF is a useful framework in rehabilitation, its practicability for the classification of disability evaluation performed by the staff of rehabilitation hospitals is still unclear. The large pension fund BfA (Bundesversicherungsanstalt für Angestellte) provided a grant to explore the feasibility of the ICF for disability evaluation in a setting of a neurological rehabilitation centre. In this centre, the Asklepios Klinik in Schaufling, a small research group was formed consisting of Max Ueberle, a political scientist, Holger Grötzbach, M.S., head of the speech and language therapy department, and Peter Frommelt, M. D., medical director of the rehabilitation centre. The research group addresses the following questions:

- How can the ICF be used as a tool for interdisciplinary goal setting and communication in clinical neurorehabilitation?
- How can the ICF be used for the disability evaluation at the end of clinical rehabilitation?
- How can the ICF be used as a communication tool between clinical institutions and social medicine experts working for the pensions funds?

In order to answer these questions, the following research plan was established:

1. Introduction of a short version of the ICF (the ICF-checklist) into the teamwork of our rehabilitation centre and a quantitative analysis of items which were regarded as relevant.
2. A qualitative research of the decision making process of medical expert working for pension funds.
   The ICF-pathway is based on the results of step 1 and step 2 and includes clinicians and experts as responders.

Integration of the ICF into interdisciplinary teamwork in neurorehabilitation

This research took place at the Asklepios Klinik Schaufling, a neurological rehabilitation centre in Lower Bavaria. The department is following a concept of interdisciplinary teamwork and patient-centred goal setting. Some elements of the ICDH had been used in goal setting before, but not in a consistent way. So the teams were trained in using ICF as a framework and in translating their professional terminology into the "ICF-language". One of the main obstacles for clinical use of the ICF is the amount of items. Furthermore, many professionals in rehabilitation reject the ICF because of the additional paperwork. Therefore, we decided to use a ICF-checklist, a generic short version of the ICF.

We applied the ICF-checklist in a consecutive series of 168 patients. Relevant items were distributed among the different professions. For each patient the checklist was filled out at the time of admission and at the time of discharge. We asked the team members to note those aspects of their patients which were not included in the checklist. Additionally, we were interested in knowing which items of the checklist were of little practical use.

In analysing the checklists of the 168 patients we determined:

- Those items which were most often used to describe the patients’ problems,
- which items were responsive to change,
- which elements and items of the ICF-checklist were regarded as important by the team members,
- which aspects or items were missing in the checklist.

Preliminary findings

Some preliminary findings are:

- The ICF-checklist was not useful for patients with neurological disabilities because there were too many items irrelevant for this group of patients.
- Out of 130 checklist items for neurological patients only 33 were used sufficiently frequent to be regarded as relevant.
- The component “context” was regarded as very useful by many clinicians.

A productive side-effect was to establish a discussion on the process of patient-centred goal-setting. Thus, the results gave insights into the “best-seller list” of ICF-Items and Domains in clinical practice. As this clinical list is not sufficient for fulfilling the demands of a disability evaluation as prescribed by the pensions funds additional research was necessary. We performed a series of fifteen interviews with medical experts in the pension funds. The qualitative analysis has not been finished but some preliminary results can be provided:

- Experts base their decisions not on formal criteria but on an "expert wisdom”.
- The ICF should not be considered as a replacement of expert reasoning.
- The ICF could improve expert reasoning by providing a common framework, a roadmap and as a communication instrument.

Next phase
The last phase of our research we will combine the results of the clinical ICF-trial and the results of the expert-interviews to formulate a pathway on how to use the ICF as a roadmap for clinical and expert work and as a communication tool. This roadmap for an ICF-based disability evaluation has the preliminary acronym NILS. We will test the application of NILS in the following months.

The ICF Research Group provides with further information in a German language website (http://www.icf-schaufing.de) and edits a quarterly newsletter Schaufinger ICF-Brief which can be viewed on the web. Printed copies are also available.

For information:
Dipl.-Pol. Max Ueberle, ICF Research Group, Asklepios Klinik Schaufing, Hausstein 2, 94571 Schaufing, Germany, e-mail M.Ueberle@Asklepios.com

Netherlands

“Hoe gaat het ermee?” (How are you doing?)
This question in Dutch was the title of a conference of the Dutch Centre on 2 May 2003, asking users of ICF and ICD-10 about their experiences with these classifications.
A number of the presentations and papers was also prepared in English for the meeting in Cologne, http://www.rivm.nl/who-fic/meeting.htm:
- Prof. dr Theo van Achterberg and H.A. Stallinga (Gonda) R.N., Using the International Classification of Functioning Disability and Health (ICF) in nursing practice (98)
- Dr Wout E.L. de Boer, ICF and social disability insurance (78)
- Theo Bougie, The use of the ICF for expressing intended use of assistive technology (41), see also pp 3, 4.
- Dr Kees van Boven, The Dutch Family of International Classifications: ICPC-2, ICD-10, and ICF (31)
- Dr Yvonne F. Heerikens and dr C.D. van Ravensberg (Dorine), Use of the ICF by allied health professionals (40)
- Rom Perenboom, Health expectancies and the ICF (76)
- Huib Ten Napel, Dutch ICD-10 and ICF in a CEN Technical Standard Format for version control and maintenance (35)
- Huib Ten Napel, Applicability of the Dutch ICD-10 Electronic tool for publication of ICD-10 updates and control of derived and related classifications (36)
- Huib Ten Napel, The Dutch ICF Electronic tool for following the ICF in applications (statistics, surveys, records) (37)

The new Netherlands ICT institute for health care (NICTIZ) has asked for an evaluation study of SNOMED CT that is reported by Pieter E. Zanstra and Egbert J. van der Haring (25), see Introduction of a Clinical Terminology in the Netherlands.

The report of the conference summarized the wishes of the participants upon the availability and improvement of international classifications in the Netherlands. Classifications, such as ICF and ICD-10, have to be available in usable formats for
- Peripheral maintenance: translated updates and new versions, lay versions and manuals
- Mapping of applications and cross walks to ICF and ICD-10
- The outline of the development and the use of these classifications and their applications. Especially the ICF has to be improved and supplemented. There is a need for
- Advises on the development of applications
- A users’ guide
- Clarification of terms and qualifiers, also for clients
- Documentation of missing terms and errors, synonyms and meronyms
- Other qualifiers for specific devices and assistance
- The data if it is an existing or a threatening problem
- A classification of personal factors
- A classification of the subjective dimension
- A selfassessment instrument (a WHO-DAS application?)

There is a problem in the Netherlands which version of ICD will be used. Very recently, a conversion is made between the DBC’s (a kind of DRG’s) and the 1980 translation of the ICD-9-CM that is in use for hospital discharge statistics. A conversion of DBC’s with ICD-10 is lacking. Furthermore the specificity of DBC’s is often less detailed than the need of specialists who value more and more the advantages of describing the specific core of their activities. If ICD-10 and ICF would be more user friendly, precise and dedicated to daily practice, they could be the backbone for the information supply on health status.

Communication is top priority in health care at present, classification lags far behind. The conference participants have shown in their presentations that classifications forms the basic condition for a clear communication without misunderstandings and classifications (and terminology?) therefore should be top priority.

For information:
Dr Willem M. Hirs, WHO-FIC Collaborating Centre in the Netherlands, willem.hirs@rivm.nl

Introduction of a Clinical Terminology in the Netherlands

Health language is still far from being harmonised. Present day classifications like ICD and procedure classifications have not been designed for use in direct individual patient care. The main objective of our study was to answer the question ‘Is it sensible to aim for a national introduction of SNOMED CT, and if so for which sectors of healthcare?’ The secondary questions were on alternatives and an estimate of costs involved. Though recent developments suggest that terminology
is only used in the context of the health record, it should be observed that there are many secondary usages of coded data such as in health statistics. The number of actors in the field, the growing complexity and interdependencies, do demand a more integrated approach of all matters of health terminology. In our view a set of eight criteria should be fulfilled before introducing a clinical terminology:
1. Safety of patient data
2. Continuity of access to patient data
3. Multiple suppliers
4. Specification and Certification
5. Ownership
6. Extensions and updates
7. Usage
8. Availability of resource

As a first step towards the introduction of a clinical terminology, a number of substantial field trials are required to determine if the postulated benefits of clinical terminologies will materialize. SNOMED is a good candidate to assist in the further elicitation of the needs for, and the scope and size of a national clinical terminology. In the context of the Family of International Classifications, we recommend to continue with attempts to link FIC-members to clinical terminologies, such as SNOMED CT.

For information:
Pieter E. Zanstra and Egbert J. van der Haring, Dept Medical Informatics UMC Nijmegen, the Netherlands, e-mail: p.zanstra@mi.umcn.nl

USA
ICF and the Social Work Profession
The prevalence of disability continues to grow in the United States. Increasingly, more social workers are encountering individuals with disabilities in their social work clinical settings. These trends emphasize a significant need for adequate training of social workers to better enable them to address disability-related issues. The ICF is a mechanism for preparing social workers about disability-related terminology and concepts. Additionally, it provides a classification scheme to enable social work practitioners to assess functional status, identify strengths and weaknesses, and determine appropriate interventions with their clients. Not only is the ICF a reliable and valid instrument to describe disability and functioning, it is designed for multiple uses across disciplines including social work. This is important since social workers in not only disability and health settings (hospitals, nursing homes, group homes, etc.) but in other settings (school, human services, social services, etc.) are working more with individuals with disabilities.

There are parallels between the ICF and social work that increase the likelihood of social workers using it. For instance, one commonly used social work framework includes the “strengths perspective” which identifies individual strengths in developing mechanisms to address social problems. The ICF facilitates the ability of social workers to identify these strengths by using the qualifiers, capacity and performance, along with environmental factors that act as either facilitators or barriers to individuals. In fact, social workers generally address the individual in his/her particular environment. As indicated in the Preamble of the National Association of Social Workers Code of Ethics, “A historic and defining feature of social work is the profession’s focus on individual well-being in a social context and the well-being of society. Fundamental to social work is attention to the environmental forces that create, contribute to, and address problems in living.” Another aspect involves the codes, which lend themselves to varied assessment approaches, since social workers use different instruments in their practice including psychometric measures, clinical interviews, self-report or proxy report, and direct observation.

While only a handful of individual social workers were involved in the beta-1 and beta-2 field trials of the ICIDH (now ICF), there has been increasing involvement of social workers in ICF activities recently. Several social workers have participated in the North American Collaborating Center (NACC) on ICF annual meetings. NASW has joined the ICF Clinical Manual Working Group led by the American Psychological Association, and NASW is actively involved with the field trials of the ICF clinical manual. This increased representation of social workers in ICF activities is encouraging, but most social worker are not informed about the ICF framework and not prepared to use the classification in their practice settings. Consequently, greater steps need to be taken to increase ICF awareness and to promote its application in the social work field.

For information:
Patricia Welch Saleeby, School of Social Work and Program in Occupational Therapy, Washington University in St. Louis, MO, e-mail: welchp@wustl.edu

Supplement List of ICF References
This is the 18th supplement to the list of ICIDH/ICF references published in September 1994.

2165 Australian Institute of Health and Welfare

2168 Bilbao A, Kennedy C, Chatterji S, Üstün B, Vasquez Barquero, Barth JT
The ICF: Applications of the WHO model of functioning, disability and health to brain injury rehabilitation
Neurol Rehab, vol 18 (2003), 239-250

2151 Chinchai P, Marquis R, Passmore A
Functional performance, depression, anxiety and stress in people with spinal cord injuries in Thailand: a transition from hospital to home
Asia Pacific Disabil Rehabil J, 14(2003)1, 30-40

2141 Eadie TL
The ICF : a proposed framework for comprehensive rehabilitation of individuals who use alaryngeal speech
Am J of Speech Language Pathology, 12(2003)2, 189-197

2156 Engels JA, Heerrens YF
Het HBO als kennisport: van tuinhekje tot triomftoeg? Hogeschool van Arnhem en Nijmegen, lectorale rede 15-5-2003, 74 p

7
2142 Finger M, Kronewirth C, Kurre A, Scherrer M, Signer S
Présentation d'un bilan unifforme pour les patients avec des troubles neurologiques: le piece, Fisio Active, 38(2003), 14-18

2160 Gorter JW
Inzicht in hersenschade en uitkomst bij cerebrale parese
Revaldata 113, 25(2003), 9-14

2162 Gustavsen M, Menshoel AM
Clinical physiotherapy documentation in stroke rehabilitation: an ICDID-2 Beta-2 based analysis
Disabil and Rehabil, 25(2003)19, 1089-1096

2153 Hartley S
CBR, a participatory strategy in Africa, based on the proceedings of a conference, Uganda, September 2001
University College London, Centre for International Child Health, 2002, 249 p

2126 Heerkens Y, Brug Y van der, Napel ten, Ravensberg D van
Past and future use of the ICF (former ICIDH) by nursing and allied health professionals
Disabil and Rehabil, 25(2003)11/12, 620-627

2136 Hurst R
The international disability rights movement and the ICF
Disabil and Rehabil, 25(2003)11/12, 572-576

2143 Jette AM, Haley SM, Kooyoomjian JT
Are the ICF activity and participation dimensions distinct?
J Rehabil Med, 35, no. 3, 145-149

2125 Kennedy C
Functioning and disability associated with mental disorders: the evolution since ICIDH
Disabil and Rehabil, 25(2003)11/12, 611-619

2163 Kirby RL
Where does assistive technology fit in ICIDH-2?
Am J Phys Med Rehabil, 81 no.8, p.636

2127 Kleijn-de Vrankrijker MW de
The long way from the international classification of impairments, disabilities and handicaps (ICIDH) to the international classification of functioning, disability and health (ICF)
Disabil and Rehabil, 25(2003)11/12, 561-564

2167 Koenen D, Niessen R, Oerumn N
ICF, een taal voor ergotherapeuten?

2157 Lie E, Heerkens YF
Classificaties en Codelijsten voor de Diëtietiek Nederlands Paramedisch instituut, maart 2003

2158 Lie E, Heerkens YF
Verslag van het BICC-project, Beheer en Implementatie van Classificaties en Codelijsten voor de Diëtietiek
Nederlands Paramedisch instituut, 2003, 16 p

2148 M Ueberle
Schaufinger ICF-Brief
Mitteilungen der Forschungsgruppe ICF an der Asklepios-Klinik Schaufling, Heft 1-4, 2002

2128 Madden R, Choi C, Sykes C
The ICF as framework for national data: the introduction of ICF into Australian data dictionaries
Disabil and Rehabil, 25(2003)11/12, 676-682

2129 Mbogoni M
On the application of the ICIDH and ICF in developing countries: evidence from the united nations disability statistics database
Disabil and Rehabil, 25(2003)11/12, 644-658

2134 McDougall J, Miller LT
Measuring chronic health condition and disability as distinct concepts in national surveys of school-aged children in Canada

2152 Miles M
CBR works best the way local people see it and build it
Asia Pacific Disabil Rehabil J, 14(2003)1, 86-98

2154 Murray CJL, Salomon JA, Mathers CD, Lopez AD
Summary measures of population health: concepts, ethics, measurement and applications
WHO, 2002, 770 p

2159 National Center on Birth Defects and Developmental Disabilities

2135 Perenboom RJM, Chorus AMJ
Measuring participation according to the international classification of functioning, disability and health (ICF)
Disabil and Rehabil, 25(2003)11/12, 577-587

2150 Pitaud P etc.
Retraite et handicap mental: analyse prospective d’une population agee de 50 a 60 ans travaillant en C.A.T., 2001, 88 p

2144 Ravensberg CD van, Heerkens YF
Communicatie in de kinderrevalidatie en ICF Keypoint, 27(2003)2, 8-9

2166 Roodbol G, Holleman G, Jongerden I, Brug Y vd
De ICF en de beschrijving van gezondheidsproblemen
Tijdschrift voor verpleegkundigen, 10(2002), 50-59

2137 Roussel P, Barral C
Reference to ICIDH in French surveys on disability
Disabil and Rehabil, 25(2003)11/12, 659-664

2145 Schallert R
Die behandlung postoperativer rest-symptomatik(en) nach Bandscheibenvorfall
Krankengymnastik, 55(2003)7, 1162-1172

2138 Schneider M, Hurst R, Miller J, Üstün TB
The role of environment in the international classification of functioning, disability and health
Disabil and Rehabil, 25(2003)11/12, 588-595

2139 Simeonsson RJ, Leonardi M, Lollar D, Bjorck-Akesson E, Hollenweger J, Martinuzzi A
Applying the international classification of functioning, disability and health (ICF) to measure childhood disability
Disabil and Rehabil 25(2003)11/12, 602-610

2146 Steinlin R
Die ambulante Langzeittherapie bei MS-Patienten : Evaluation des Therapieverlaufes
Fisio Active, 38(2003)4, 5-6, 9-10, 13-14

2164 Stinemann M
Assistive technology outcomes: commodity or a therapy?

2130 Stucki G, Ewert T, Cieza A
Value and application of the ICF in rehabilitation medicine
Disabil and Rehabil, 25(2003)11/12, 628-634

2131 Swanson G, Carrothers L, Mulhorn KA
Comparing disability survey questions in five countries: a study using ICF to guide comparisons
Disabil and Rehabil, 25(2003)11/12, 665-675

2149 Thomas Maya, Thomas MJ
Manual for CBR Planners
Asia Pacific Disability Rehabilitation J., Group Publication, 2003, 88 p

2161 Tweedy SM
Taxonomic Theory and the ICF: Foundations for a Unified Disability Athletics Classification
Adapted Physical Activity Quarterly, 19(2002), 220-237

2132 Ueda S, Okawa Y
The subjective dimension of functioning and disability: what is it and what is it for?
Disabil and Rehabil, 25(2003)11/12, 596-601

2133 Üstün TB, Chatterji S, Bickenbach J, Kostanjsek N, Schneider M
The international classification of functioning, disability and health: a new tool for understanding disability and health
Disabil and Rehabil, 25(2003)11/12, 565-571

2140 Wade DT
Community rehabilitation, or rehabilitation in the community?
Disabil and Rehabil, 25(2003)11/12, 875-881

2155 Wade DT, Halligan P
New wine in old bottles: The WHO ICF as an explanatory model of human behaviour

2147 Yamane H, Kinoshita T
An interational model of mental disability (IMMD) based on the international classification of functioning and disability (ICIDH-2)
Asian J Occup Ther, 1(2001), 1-11