IMPLEMENTATION OF THE OFFICIAL MEXICAN STANDARD FOR DISABILITY CERTIFICATION BASED ON ICF

14-18 October 2024
WHO-FIC
Poster Number
400

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Abstract The Official Mexican Standard for Disability Certification was approved on February 2, 2024, in Mexico. Following this approval, the integration and weighting of the components in the disability certification, based on the International Classification of Functioning, Disability, and Health (ICF), will determine the percentage of disability and help identify the needs of certified individuals. This will enable the government, through its various institutions, to take appropriate actions. This poster illustrates the implementation of this standard.

Introduction

On August 20, the process for obtaining Electronic Disability Certificates (CEDIS) began in Mexico under the Official Standard NOM-039-SSA3-2023, following the transition periods outlined in the February 2, 2024, publication in the Official Gazette of the Federation.
The first Center for the Valuation and Issuance of Certificates (CEVADECE) was established at the T-III San Andrés Tomatlán Health Center in Iztapalapa, Mexico City, where the first evaluations were processed through the system developed by the Ministry of Health in collaboration with the Mexican WHO-FIC CC.
This achievement represents almost six years of dedicated work, involving significant dialogue and close collaboration among health organizations, individuals with disabilities, families, professional associations, and various government agencies, such as education, population, national statistics offices, human rights commissions, and many other entities.
These efforts embraced the approach to functioning and disability outlined in the International Classification of Functioning, Disability, and Health (ICF).

A New Phase: Making the Process Available to the Population

The challenge now is to ensure that CEVADECE centers are accessible to the population, whether through the health sector or other organizations, which will gradually implement NOM-039 in their internal processes to make the certification available to all.
This process requires significant commitment from each organization to incorporate disability assessment and certificate issuance (CEDIS) into their services. The data collected from August 20 onward will be integrated into the Subsistema de Información sobre Discapacidad (SIDIS), which will gradually address the statistical invisibility of people with disabilities in Mexico. Additionally, SIDIS is the first official product in Mexico to use the International Classification of Diseases, Eleventh Revision (ICD-11).
The data will help initiate public health and disability-related actions, based on a comprehensive understanding of the epidemiology of functioning and health conditions in the Mexican population.

How Long Will It Take?

Each health institution is responsible for initiating the process by submitting a request to the Ministry of Health to accredit the CEVADECE in accordance with Official Standard. After a series of steps, including training health personnel and verifying the required aspects, the institution will be accredited as a CEVADECE.
Health personnel are trained in human rights, the ICF, WHODAS 2.0, ICD-11, and in the use of tools to assess how a person's health condition affects daily life, as well as environmental barriers.
The estimated timeframe for this implementation is two years, although it could be shorter or longer depending on government interest and societal pressure. It's also important to note the desirable participation of academic institutions and research centers, which will find SIDIS to be a valuable source of information for in-depth research and analysis.

Next Steps

Harmonizing the Regulatory Framework. Mexican laws, regulations, and standards offer diverse conceptualizations of disability, many of which focus on disability as a deficiency within the individual. This conceptual framework needs to evolve towards a biopsychosocial understanding, aligned with human rights principles, which is key for the implementation of Article 12 of the Convention on the Rights Persons with Disabilities (CRPD) Mexico. Policies Recognizing Differences Among People with Disabilities.

Most public policies related to disability in Mexico, and many other countries, require proof of disability to access services or benefits. The CEDIS opens the door for establishing policies at various levels of government that not only implement general policies but also recognize that some individuals with disabilities require more intensive support. For instance, the CEDIS will register the need for human or animal assistance for those who require it, thus allowing a differentiation within the disabled population regarding the provision of support.

Long-Term Outlook

CEDIS has a validity period, ranging from one to five years, depending on the determination of health personnel in charge of the process. This system allows for regular updates on the individual's condition and their interaction with the environment.
As time passes, and as conditions evolve, the CEDIS will enable Mexico to have a more comprehensive informational landscape. This will allow for better documentation of public issues related to disability, as well as a more detailed understanding of how policies affect individuals.
Ultimately, the Mexican government will have access to improved data to formulate and implement policies aligned with the CRPD, fulfilling the commitments outlined in Article 31 on data collection and statistics, as required by this Human Rights instrument.

Acknowledgment

We would like to express our deepest gratitude to the government agencies, civil society organizations, and individuals with disabilities who contributed their technical expertise and valuable input in the development of the Electronic Disability Certificate in Mexico. This is a tool that will make a significant impact on disability records and data, contributing to more informed and effective decision-making in public health.

Disability Certificate Task Force in Mexico

https://www.gob.mx/salud/prensa/302-secretaria-de-salud-entrega-nuevo-certificado-electronico-de-discapacidad-e-instala-primer-centro-de-valoracion

WHO - FAMILY OF INTERNATIONAL CLASSIFICATIONS NETWORK ANNUAL MEETING 2024

TAJIKISTAN: ON THE WAY TO THE BIOPSYCHOSOCIAL MODEL

14-18 October 2024

WHO-FIC

Poster Number

401

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Abstract The Government of the Republic of Tajikistan decided to conduct disability assessment on the base on the biopsychosocial model prior to the ratification of the UN Convention on Rights of Persons with Disabilities. Planning and trainings have been already made. The Ministry Health and Social Protection of the Population needs for additional funds for the ICF translation into the Tajik language and inclusion of the ICF terminology in the national legislation.

Introduction

Before the ratification of the UN Convention on Rights of Persons with Disabilities, the Government of the Republic of Tajikistan decided to conduct disability assessment on the base on the biopsychosocial model. To do this, it is necessary to develop new criteria of disabilities and compare them with the current ones in order to avoid an increase in disability level in the country or dissatisfaction of citizens.

The World Bank classifies the economy of Tajikistan as a lower middle income one with GDP per capita 1,189.0 in current US dollars (2023) and population 10,1 mln (2023) (https://data.worldbank.org/country/tajikistan?view=chart).

Persons with disabilities are 3 % of population in Tajikistan. The state guarantees pensions for persons with disabilities and provide them with limited number of assistive devices (prosthetics, wheelchairs, canes etc.) free of charge.

Methods & Materials

The medical model of disability forms the framework of the current disability assessment criteria in Tajikistan; therefore, they should be reviewed. In addition, new documents related to this procedure should be developed, for example, rules for conducting a medical and social examination, an appointment form to a medical and social examination, a form to define recommendations for rehabilitation of a disabled person, etc.

The initial stage includes setting new goals for the state service of medical and social examination, i.e. to refocus on assessing functioning disorders to provide citizens in need of rehabilitation, translation into the national language of WHO related guidelines and documents and the International Classification of Functioning, Disability and Health (ICF). On this framework, the next step forward will contain trainings for specialists and testing of the new approach with the simultaneous examination using the previous disability criteria to exclude,

on the one hand, an extremely high growth of disability level in the country and, on the other hand, to prevent development of the very strict criteria of disability and the provide disabled people with maximum assistance depending on the current economic situation.

Results

In June 2024, an ICF training was organized for key specialists and conducted in St. Petersburg in Russia. The process of ICF implementation in the country was identified, including translation of the classification into the national language and broader trainings on ICF with the prospect of transitioning interventions in accordance with International Classifications of Health Interventions (ICHI).

Chart 1: Specialists from State Expertise of Medical and Social Examination of Tajikistan in Saint Petersburg

The key points of this approach were clarified for both citizens and the administration. The specialists analyzed an example of an examination based on the ICF for one of the diagnoses (tuberculosis). A general approach to review the current criteria was developed.

ICF trainings were planned for specialists in healthcare, social service, education, and the early intervention service for children and their families.

In July-August 2024, the Ministry of Health and Social Protection of the Population of the Republic of Tajikistan held several meetings, when leading specialists and officials of the Ministry discussed the new procedure and criteria for the disability assessment, stages and schedule of the implementation.

Chart 2: Discussion of plans on the new procedure and criteria for the disability assessment in the Ministry of Health and Social Protection of the Population of the Republic of Tajikistan

Chart 3: Presentation of the new criteria for the disability assessment to specialists from State Expertise of Medical and Social Examination in Tajikistan

Conclusions

Currently, the Ministry is in dire need of financial assistance for the translation of the ICF into the Tajik language and the inclusion of the ICF terminology in the national legislation within the medical and social legal fields. With support, specialists are determined to complete the current stage of work, namely the review of the disability criteria, examination procedures and translation of the ICF in the next two months.

Acknowledgements or Notes

Authors thank the specialists from State Expertise of Medical and Social Examination who participate in the implementation in Tajikistan, and specialists from Albrecht Federal Scientific and Educational Centre of Medical and Social Expertise and Rehabilitation for consultations.

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The Global Use of the International Classification of Functioning, Disability and Health (ICF) in Occupational Therapy

14-18 October 2024
WHO-FIC
Poster Number
402

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Abstract To understand the global use of the ICF in occupational therapy, a survey was conducted with member organisations of the World Federation of Occupational Therapists (WFOT). Results from 45 member organisation respondents indicated the ICF is used most consistently in the education of occupational therapists, although widespread utilisation of the classification in practice and research was also reported.

Introduction

The World Federation of Occupational Therapists (WFOT) has a membership of national occupational therapy organisations from across the globe. To gain an understanding of the current use of the ICF in occupational therapy practice, education and research in member organisations, a survey of country delegates was conducted.

Methods & Materials

Delegates from 105 WFOT member organisations were surveyed. An email was sent in mid-April 2024 to delegates to request completion of an online survey that collected information using multiple choice and open-ended questions. One reminder email was sent to respond to the survey before the deadline of 30 May 2024.

The survey requested delegates to report the general frequency of ICF use in their country in occupational therapy practice, education and research (rated as never, seldom, sometimes, usually or always); identify the usual purpose(s) for the ICF use; and the components of the classification used by occupational therapists (conceptual model, terminology, coding and measurement, core data sets and other). Each survey section (practice, education, research) requested information regarding resources developed in the country to facilitate use of the ICF and provided opportunity for other comments.

Descriptive statistics were calculated for the responses to the close-ended questions. The free text comments of respondents were examined using thematic analysis for any supplementary insights they provided.

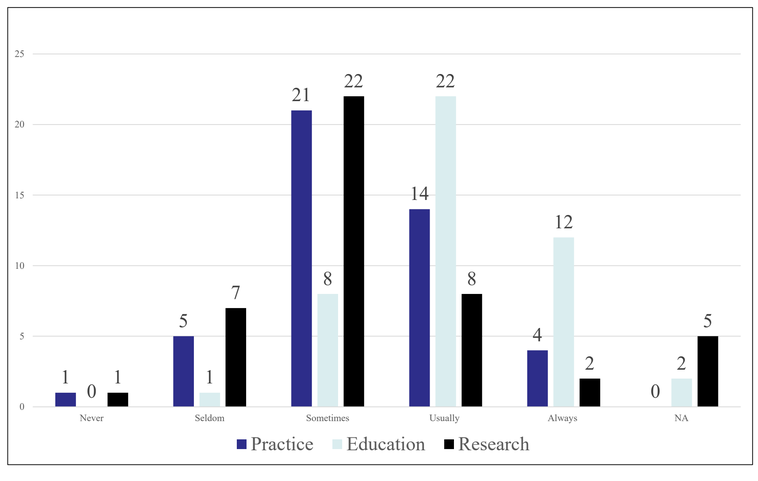

Chart 1: Use of the ICF in WFOT Member Organisation Countries (n=45)

Results

A 43% response rate was received for the survey, with the large majority of respondents from high income countries (67%).

Most (98%) of the 43 member organisations with education programmes stated the ICF is used in the education of occupational therapists in their country, with 80% indicating that the ICF is 'always' or 'usually' used (Chart 1). The ICF is used in occupational therapy education most frequently for teaching about health, function and disability (95% of respondents), connecting the ICF with occupational therapy models and theory (81%) and promoting consistent use of terminology (72%). Most often, occupational therapy students are taught the ICF conceptual model (93% of respondents) and component terminology (88%)(Chart 2). Case studies, policies and other teaching tools were the most frequently developed resources to assist with the use of the ICF in occupational therapy education.

Use of the ICF in occupational therapy practice was also reported by most respondents (98%), although less than one half (40%) stated the ICF was 'usually' or 'always' used. The ICF was used most frequently to frame assessments (66%), plan intervention (59%), conduct inter-disciplinary planning / reporting (57%), complete documentation (57%) and set goals (57%). Most frequently, occupational therapists used the ICF component terminology (80%) or conceptual model (73%) in their practice. A number of resources were reported to have been developed to integrate the use of the ICF in practice, most often electronic health record templates and data sets.

Of the 40 countries actively engaged in occupational therapy research, the majority (55%) indicated that the ICF was sometimes used in studies; 25% stated the ICF was usually or always used. Most frequently, the ICF was used as a research framework (75%) or to analyse and organise research findings (58%) and data collection (58%). Component terminology and the ICF conceptual model were almost equally used in research involving the classification (85% and 83% respectively). Strategies reported to be used to promote the use of the ICF in research included the publication of peer reviewed articles, development of policy and provision of research grants.

Conclusions

Although the results of the survey represent a sample of less than one-half of WFOT member organisations, interesting insights can be gained from the findings. The large majority of respondents reported the use of the ICF in occupational therapy in their country, particularly in education as a model to convey understanding of the interaction of factors regarding people and the environment with activity and participation for health and wellbeing. The ICF conceptual model and terminology are used across the globe throughout the occupational therapy practice process, although less consistently and primarily to frame assessment, intervention planning and goal setting. The ICF model and terminology are used in research, although again with less consistency and as a framework to organise data collection and presentation.

Awareness of the ICF, the complexity of the classification and education needed to use the ICF were identified as deterrents to its use; concern regarding alignment of ICF components with the occupational therapy concept of 'occupation' was also raised. A range of resources have been developed to facilitate the use of ICF in occupational therapy, although the need was identified for more supports. Suggestions were provided for the development of an ICF user guide, interactive App, case studies and exemplars, process model, database of standardised tools, electronic health record templates and model occupational therapy education curriculum based on the ICF.

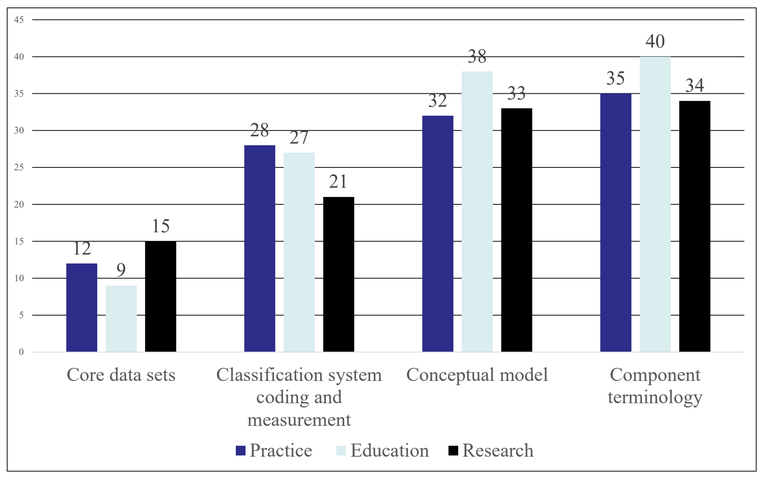

Chart 2: Components of ICF Used in Occupational Therapy (Practice n=45, Education n=43, Research n=40)

Acknowledgements or Notes

WFOT would like to thank the delegates who participated in the survey.

WHO - FAMILY OF INTERNATIONAL CLASSIFICATIONS NETWORK ANNUAL MEETING 2024

Development of an assistive product search system using ICF coding

14-18 October 2024
WHO-FIC
Poster Number
403

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Abstract To support the activities and participation of persons with disabilities, it is adequate to intervene using appropriate assistive products that suit their body functions and structures. For this reason, we developed a system that can search assistive products based on ICF codes for activity/participation and body functions/structures. A trial evaluation by allied health professionals indicated that the number of products displayed was too large an issue. Therefore, we made some improvements, such as reducing the number of ICF codes mapped with products, to improve searchability.

Introduction

To support the activities and participation of persons with disabilities, it is adequate to intervene using appropriate assistive products that suit their body functions and structures. However, it is difficult for many allied health professionals to grasp information on various assistive products. Our previous study developed a standard guide for selecting and implementing assistive products using ICF coding[Inoue, T., WHO-FIC Network Annual Meeting, poster presentation, 2023.]. This report introduces a search system for assistive products described in this guide[https://at-map.sakura.ne.jp/ in Japanese].
The purpose of this search system is to enable allied health professionals to obtain accurate information on assistive products that is useful in helping them select and introduce assistive products using the ICF. The search system is designed with a user-centric approach, focusing on the user's activities and participation targeted for improvement, the body functions and structures, and finding the appropriate product for each user.

Methods & Materials

A tabular system was developed with the ICF categories of ‘activity/participation’ on the horizontal axis and the categories of ‘body functions/structures’ on the vertical axis. In this system, a list of assistive products related to both categories is displayed by selecting one category at a time from the horizontal and vertical axes and clicking on the intersection where the two intersect.
For registration in the system, a wide variety of assistive products, ranging from those for physical disabilities to those for cognitive disabilities, were selected by experts from the respective related health professions, such as physical and occupational therapists. ICF codes (first and second level) were coded for each product for the relevant activity/participation, body functions, and structures.
A trial evaluation of this search system was conducted with 53 allied health professionals. They were given the previously mentioned guide and asked to use this system to select possible support products according to three scenarios for specific users. A survey was then conducted on the good and bad aspects of the guide and system for searching for assistive products and on requests for improvements. From the free descriptions regarding these issues, the contents regarding the system were extracted and analysed for issues.

Results

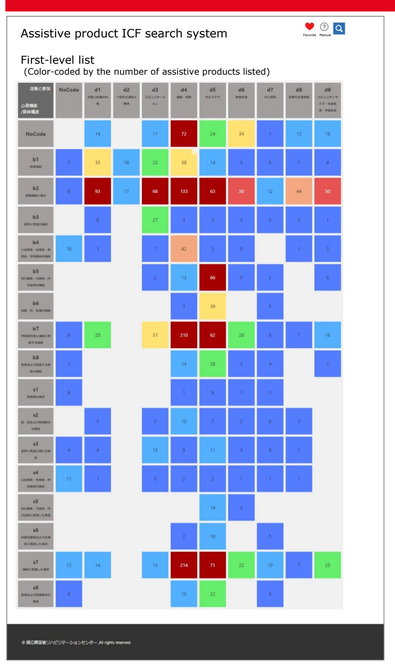

Chart 1: The assistive products search system (Table of first level).

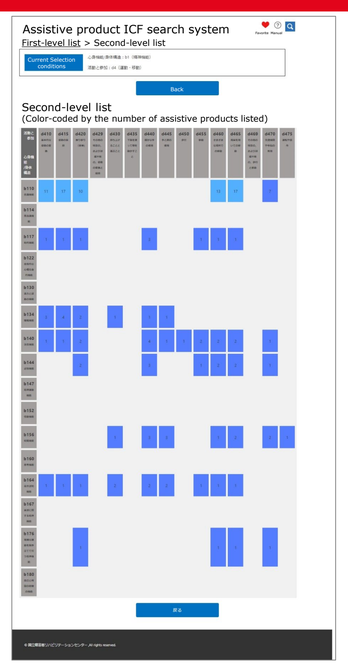

Chart 2: Table of second level.

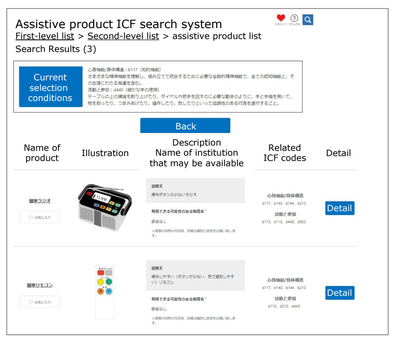

Chart 3: List of products.

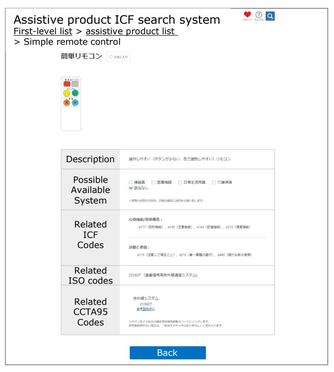

Chart 4: Product detail.

Chart 1 shows the top screen of the developed system. As of August 2024, 771 assistive products have been registered in this search system. The horizontal-vertical axis of this screen consists of the first level of ICF. Each intersection shows the number of products related to the category on the horizontal-vertical axis. Clicking on this intersection will now show the second level of the table (Chart 2). Clicking on an intersection in this table displays a list of products associated with that intersection (Chart 3). Selecting a product from this list and pressing the “Details” button displays detailed information about the product (Chart 4). This page contains an illustration of the product, a description, the name of the social security scheme available to obtain the product, and the related ICF/ISO9999 code. Clicking on the “Reference Product Examples” link will take you to the Japanese Assistive Product Database, where you can browse for related products [TAIS(Technical Aids Information System) by The Association for Technical Aids https://www.techno-aids.or.jp/ServiceWelfareGoodsList.php in Japanese].
Our evaluation revealed that the ICF assessment was a challenge, and the search results often led to many products, making it difficult to find the desired one. To address this, we introduced a new function that allows users to search for products by free word or by the name of a system that may be available. This not only simplifies the search process but also helps in finding the desired product more efficiently. Additionally, we narrowed down the ICF codes that can be mapped to assistive products, reducing the number of products displayed.
On the other hand, as requests for improvement, it was noted that a browsing history should be kept and that candidate assistive products should be able to be compared. In this regard, for the first/second level intersections, the upper right corner is folded if it has already been viewed. In the product list, the colour is greyed out when the product has already been viewed.
A function has been established for product comparisons that allows users to register “favourites" from the product list and product detail screens. This will enable users of the system to compare and consider products they are interested in.

Conclusions

The tabular system was developed to search for products using the ICF code. Several issues were identified during the trial evaluation, and improvements were made to the system in response. The improved system allows users to check their browsing history, compare equipment, and narrow their search by available systems, allowing them to search for equipment more efficiently.

Acknowledgements or Notes

This work was supported by MHLW Disability Policy Comprehensive Research Project Program Grant Number JPMH19GC2002, JPMH21GC2003, and JPMH23GC2003.

WHO - FAMILY OF INTERNATIONAL CLASSIFICATIONS NETWORK ANNUAL MEETING 2024
14-18 October 2024
WHO-FIC
Poster Number 404

The association between each of 6 Washington Short Set questions and WHODAS2.0 (12-question version)

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Abstract The purpose of this study is to clarify the relationship between each score classification of the "Washington Short Set 6 Items" and the 12 items of WHODAS2.0 (12-item version). We used the "Research and Study Project on Improving Statistics on Persons with Disabilities in FY2019 (Internet Survey) 2020" (N=23210) conducted by the Cabinet Office. For each item of the "Washington Short Set 6 Items". For each item, the ratio (1:”It's very difficult, I can't do it at al” vs 0:”no difficulty, some difficulty”) of the average scores were indicated. The items with the highest average score ratios were Question 6 "Concentrating on doing something for ten minutes?", Question 8 " Washing your whole body? ", and Question 9 " Getting dressed?". As WHODAS2.0 (12 items) is a part of ICD-11 V chapter items, so although it is limited, it seems appropriate question items to extract "daily life functions."

Introduction

Chapter V in ICD-11, which was newly established from the perspective of linking disease and daily functioning, is composed of the WHO Disability Assessment Schedule (WHODAS2.0), Model Disability Survey (MDS), and Generic functioning domains (some of these questions are overlapping). The essence of this approach is to link daily functioning with the statistics of cause of death and/or disease. If disease classification based on ICD-11 progresses and “daily functioning” can be extracted in surveys and statistics, it would enable a subject to predict current and future diseases and/or causes of death through the relationship with “daily functioning”.

The purpose of this study is to clarify the association between each score of 6 "Washington Short Set Questions" and each score of 12 questions of WHODAS2.0 (12-question version) as an example.

Methods & Materials

We applied the "Research and Study Project on Improving Statistics on Persons with Disabilities in FY2019 (Internet Survey) 2020" (N=23210) conducted by the Cabinet Office.

For each of 6 questions (1)” Do you have difficulty hearing, even if using a hearing aid?” ~(6) “Do you have difficulty (with self-care such as) washing all over or dressing?” of the "Washington Short Set ", the ratio (1:”Can't do it at all, Yes, a lot of difficulty,” vs 0:”Yes, some difficulty, No difficulty”) of the means for each question of WHODAS 2.0 (the1st~12nd question) were calculated, and their ratios were indicated (green if the ratio >= 5, yellow if the ratio >= 10, Table 1).

Results

Table 1 shows means, standard deviations (SD), and the ratio of these means for each of 6 questions of Washington Short Set, when it was measured by each of 12 questions of WHODAS2.0.

The questions with the ratio >=10 were (5) 10.16(Washington SS) in Q6 “Concentrating on doing something for ten minutes?” (WHODAS2.0), (3)16.70, (4)10.12, (5)11.37, (6)13.84 (Washington SS) in Q8 “Washing your whole body?” (WHODAS2.0), and (2)11.39, (3)19.99, (4)12.96, (5)13.94, (6)17.18 (Washington SS) in Q9 “Getting dressed?” (WHODAS2.0).

Q2(Taking care of your household responsibilities?), Q3(Learning a new task, for example, learning how to get to a new place?), Q6(Concentrating on doing something for ten minutes?), Q8(Washing your whole body?), and Q9(Getting dressed?) of WHODAS 2.0 have the ratio >=5 for many questions in Washington SS.

The WHODAS2.0 questions with the highest ratios for the 6 questions of Washington SS are all Q9(Getting dressed?), with values of (1)9.80, (2)11.39, (3)19.99, (4)12.96, (5) 17.18, and (6)5.24, respectively.

Conclusions

The questions of WHODAS2.0 with the high mean ratio were Q6 "Concentrating on doing something for ten minutes?", Q8 " Washing your whole body? ", and Q9 " Getting dressed?". As WHODAS2.0 questions are a part of ICD-11 V chapter questions, so although it is limited, WHODAS2.0 (12-question version) seems an appropriate question set to extract "daily life functions.

Table 1 The association between each of 6 Washington Short Set questions and each question of WHODAS2.0 (12-question version)

question number	Reverse question	Supplementary Questions	Washington Short set 6 items	0/1[*1)]	n	WHODAS_1[*2)]			WHODAS_2			WHODAS_3			WHODAS_4			WHODAS_5			WHODAS_6		
						Mean	Ratio[*3)]	SD[*4)]	Mean	Ratio	SD	Mean	Ratio	SD	Mean	Ratio	SD	Mean	Ratio	SD	Mean	Ratio	SD
		(1)	Do you have difficulty seeing, even if wearing glasses?	0	21717	0.1875	3.86	0.5934	0.1293	5.11	0.4791	0.1292	5.16	0.4905	0.2178	3.73	0.6977	0.2505	3.31	0.6469	0.0968	6.39	0.4315
				1	1493	0.7227		1.2849	0.6611		1.230	0.6671		1.2333	0.8125		1.368	0.8292		1.2776	0.6189		1.2177
		(2)	Do you have difficulty hearing, even if using a hearing aid?	0	22047	0.1958	3.66	0.610	0.1356	5.11	0.4917	0.1365	5.00	0.5063	0.2278	3.47	0.7158	0.261	3.04	0.6616	0.102	6.56	0.4424
				1	1163	0.7163		1.3166	0.693		1.300	0.6819		1.2855	0.7911		1.3673	0.7945		1.321	0.669		1.3006
		(3)	Do you have difficulty walking or climbing steps?	0	21738	0.1648	7.83[*5)]	0.5036	0.1053	9.71	0.4133	0.117	7.30	0.4551	0.1928	6.17	0.6444	0.2365	4.41	0.621	0.0894	8.23	0.4061
				1	1472	1.212		1.5332	1.0224		1.3708	0.8546		1.3414	1.1902		1.5249	1.0442		1.3568	0.7357		1.2974
		(4)	Do you have difficulty remembering or concentrating?	0	21966	0.1931	3.78	0.6046	0.1301	5.79	0.4806	0.1259	6.61	0.4789	0.2157	4.49	0.693	0.250	3.86	0.6388	0.0923	8.71	0.4142
				1	1244	0.7307		1.313	0.7532		1.302	0.8328		1.3523	0.9686		1.4462	0.9622		1.3985	0.8039		1.362
		(5)	Using your usual language, do you have difficulty communicating, (for example understanding or being understood by others?)	0	21980	0.190	4.17	0.6982	0.1278	6.26	0.4736	0.1236	7.14	0.4742	0.2132	4.79	0.6862	0.2461	4.20	0.632	0.0878	10.16[*5)]	0.400
				1	1230	0.7927		1.3446	0.8008		1.3313	0.8821		1.3638	1.022		1.484	1.0325		1.4236	0.8919		1.3894
		(6)	Do you have difficulty (with self-care such as) washing all over or dressing?	0	22093	0.1882	4.71	0.5869	0.1281	6.74	0.4673	0.1319	6.03	0.4911	0.2207	4.32	0.6994	0.2565	3.54	0.6511	0.0982	7.81	0.4306
				1	1117	0.8872		1.4609	0.863		1.4161	0.795		1.3731	0.9543		1.4782	0.9069		1.3958	0.7672		1.360
計				0	14625	0.130	2.91	0.518	0.0894	3.24	0.4177	0.0836	3.60	0.4095	0.1584	2.67	0.6152	0.1789	2.72	0.559	0.0608	4.10	0.3505
				>=1	8585	0.3782		0.8536	0.2897		0.7531	0.3005		0.7778	0.4224		0.960	0.4783		0.8983	0.249		0.7358

question number	Reverse question	Supplementary Questions	Washington Short set 6 items	0/1	n	WHODAS_7			WHODAS_8			WHODAS_9			WHODAS_10			WHODAS_11			WHODAS_12		
						Mean	Ratio	SD	Mean	Ratio	SD	Mean	Ratio	SD	Mean	Ratio	SD	Mean	Ratio	SD	Mean	Ratio	SD
		(1)	Do you have difficulty seeing, even if wearing glasses?	0	21717	0.0038	3.71	0.662	0.067	7.87	0.3795	0.0516	9.80	0.3357	0.1411	4.69	0.5256	0.1603	4.35	0.5848	0.2351	3.52	0.7468
				1	1493	0.7562		1.3158	0.5271		1.1859	0.5057		1.1679	0.6611		1.2293	0.6966		1.2629	0.8272		1.3732
		(2)	Do you have difficulty hearing, even if using a hearing aid?	0	22047	0.2125	3.52	0.6754	0.0694	8.82	0.3964	0.0532	11.39	0.3407	0.1464	4.83	0.5339	0.1676	4.24	0.5966	0.2456	3.24	0.764
				1	1163	0.7481		1.3612	0.6122		1.280	0.6053		1.270	0.7077		1.3134	0.7111		1.3233	0.7962		1.3793
		(3)	Do you have difficulty walking or climbing steps?	0	21738	0.164	8.25	0.5556	0.0484	16.70	0.3075	0.0367	19.99	0.2777	0.1368	5.35	0.5121	0.157	4.79	0.5759	0.2106	5.68	0.6979
				1	1472	1.3526		1.620	0.8084		1.3472	0.733		1.2842	0.7323		1.290	0.7527		1.3063	1.197		1.540
		(4)	Do you have difficulty remembering or concentrating?	0	21966	0.2069	3.93	0.6649	0.0649	10.12	0.373	0.0493	12.96	0.3259	0.1309	7.21	0.4923	0.1621	6.23	0.560	0.234	4.12	0.7431
				1	1244	0.8127		1.3847	0.6568		1.285	0.6383		1.2777	0.9446		1.4276	0.9477		1.4395	0.9638		1.4621
		(5)	Using your usual language, do you have difficulty communicating, (for example understanding or being understood by others?)	0	21980	0.2037	4.30	0.6594	0.0623	11.37	0.3632	0.048	13.94	0.3215	0.1329	6.91	0.5016	0.160	6.64	0.5553	0.2279	4.74	0.730
				1	1230	0.8756		1.410	0.7099		1.3183	0.6683		1.2917	0.9187		1.3933	0.9969		1.4536	1.0813		1.520
		(6)	Do you have difficulty (with self-care such as) washing all over or dressing?	0	22093	0.2036	4.65	0.6523	0.0597	13.84	0.3448	0.0454	17.18	0.3036	0.1442	5.38	0.5271	0.1643	4.86	0.6894	0.2362	4.25	0.7428
				1	1117	0.9463		1.5083	0.8263		1.4263	0.7907		1.391	0.7753		1.3634	0.7986		1.3736	1.0036		1.5263
計				0	14625	0.1486	2.65	0.5854	0.0429	4.38	0.3185	0.0315	5.24	0.2772	0.1022	2.91	0.4582	0.1166	2.81	0.5154	0.182	2.35	0.6764
				>=1	8585	0.3939		0.9151	0.188		0.6762	0.1649		0.6431	0.2977		0.790	0.328		0.8418	0.4284		0.9889

DEVELOPMENT AND IMPLEMENTATION OF THE ACTIVITY AND PARTICIPATION QUESTIONNAIRE FOR CHILDREN AND ADOLESCENTS (CAPIA) IN MEXICO

14-18 October 2024
WHO-FIC
Poster Number 405

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Fundación Teletón Mexico, SEP, IMSS, MoH, INPer, PAHO, INR LGII, INGUDIS, Llévame a tu mar. Mexican WHO-FIC CC

Abstract Childhood and adolescence are marked by constant developmental changes. The International Classification of Functioning, Disability, and Health for Children and Youth (ICF-CY) addresses health components and related factors through a biopsychosocial model of functioning and disability. In Mexico, significant efforts have been made to develop an instrument that identifies difficulties in Activities and Participation among minors. These efforts have culminated in the Activity And Participation Questionnaire For Children And Adolescents (CAPIA).

Introduction

Disability assessment has evolved through various approaches or models. Since the publication of the International Classification of Functioning, Disability and Health (ICF) and its conceptual model, which emphasizes the integration of various components into an interactive model, it has been possible to analyze the complexity of health statuses, functioning, and disability across different life stages and various environments. This has facilitated the gradual adoption of the biopsychosocial approach.

Within this context, and as a result of identifying the need for a tool derived from the ICF-CY to assess the Activities and Participation component, the Childhood and Adolescence Activity and Participation Questionnaire (CAPIA by acronym in Spanish) was developed for Mexican WHO-FIC CC. This questionnaire evaluates various areas of development across different age ranges using a biopsychosocial approach.

Methods & Materials

The validation process of an instrument enables its use with confidence, as it verifies that it measures the intended variables appropriately and consistently under the same circumstances.

Selection of codes. The codes from the Activities and Participation component were reviewed according to the recommendations of the ICF-CY. Those that were considered most relevant for the disability assessment instrument for individuals under 18 years old were included, in accordance with Annex 2 of the ICF-CY, specifically from the section Selection of code groupings to form the profile of an individual

1. Integration of the panel of experts
2. Bibliographic search
3. Documentary review of instruments
4. Guided discussions
5. Questionnaire construction
6. Content and appearance validation
7. Relevance validation
8. Results

Fig. 1. The validation stages of CAPIA

Based on the various information reviews, documents were generated to summarize the information and set work objectives. It was determined that the instrument used for certifying disability in individuals under 18 years of age should extensively explore the concept of activities and participation, unlike other published instruments that focus separately or in combination on the school, psychomotor development, or social domains. As mentioned earlier, the codes were reviewed according to the recommendations of the ICF-CY. Those considered most relevant for the disability assessment instrument for individuals under 18 years old were included.

Establishment of age ranges for evaluation. With the purpose of differentiating the skills developed throughout life, the need to create age groupings was established.

Implementation of the Delphi Methodology. Participants from various fields, age groups, occupational profiles, and academic backgrounds were proposed to form rounds based on the Delphi methodology. The main objective was to generate ideas regarding the selected question matrix. Participants provided their opinions on each question and rated them using a Likert scale. The synthesis of the feedback was carefully reviewed to avoid redundancies and to organize conflicting proposals.

Relevance Validation.. It was considered that the domain being evaluated should already be well-established for the respective age group and could signify limitations or restrictions, thereby influencing the overall evaluation. Items related to the onset and continuity of life, as well as those concerning communication, were identified as relevant when they assessed whether participation had already been achieved.

Scoring. CAPIA was developed as a software tool that automatically calculates the score for the Activities and Participation section. The maximum possible score for this instrument ranges from 0 to 100. This score is calculated based on age-specific domains, meaning each domain carries the same weight within the age groups, as outlined in the table 1.

Results

Delphi Methodology Results. A total of 18 surveys were collected, identifying responses marked as "strongly disagree." These responses were analyzed within the group, and characteristics such as age and wording were refined. One question was directly eliminated based on frequency analysis, retaining only those domains that received a majority of "strongly agree" from external experts. Based on the reviewers' comments and following group discussions, adjustments were made to the wording and the applicable age ranges. CAPIA achieved a validity of over 80% (with a minimum of 81.5%) per chapter, resulting in a final validation percentage of 83.25%.

Conclusions

The development of the CAPIA instrument represents a significant advancement in the certification of disability in Mexico for people under 18 years of age.

Acknowledgment of Service and Contribution

We would like to express our deepest gratitude for the invaluable technical expertise and coordination provided by **Verónica Miriam López Roldán** in the development of the CAPIA. Her dedication, professionalism, and tireless work were essential to the successful creation of this important instrument. Verónica not only brought extraordinary knowledge and experience to this project but also demonstrated an exceptional ability to lead, unite teams, and guide complex processes with precision and care. Her contributions were critical in shaping the CAPIA, and her commitment to ensuring the highest standards have left an indelible mark on all those who had the privilege of working with her. Although Verónica is no longer with us, her legacy of excellence will continue to inspire and influence the work we do. We are profoundly grateful for her contributions, and she will be deeply missed.

Enrichment of ICF index terms from real-life data

14-18 October 2024
WHO-FIC
Poster Number 406

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Abstract Easy searching of classification related index terms is essential to facilitate use of classifications in real life. The ordering of natural language expressions specifically linked to ICF categories from 3 different settings produced a rich thesaurus of potential index terms that needed manual curation to sort them in term of significance, relevance, applicability and correct position within the ICF terminology. During an experimental workshop held during the FDRG mid year meeting on May 2024 in Mexico City expressions recorded in the systematized dataset in association with 50 second level ICF categories were object of cleansing and labelling as synonyms/equivalent terms or related terms by FDRG members (n=24). The process started with the agreed definition of the criteria to folllow in selecting the items and resulted in the selection of a number of terms and expressions that could appropriately be proposed for inclusion in the ICF..

Introduction

To equip the ICF with the qualities needed for an easy searchable electronically manageable yet solidly founded classification a substantial enrichment of index terms coming from real life use cases is urgently needed. A fully digitized terminological system connecting ICF to the other two WHO classifications (ICD-11 and ICHI) promises to reduce maintenance cost and allows seamless joint use of the three classifications and a unified representation of concepts related to health, affording the possibility of computable integration and linkage with other terminologies and ontologies.
To this end the extraction and selection of potential new index terms from records of real life ICF use seems the soundest approach.

Methods & Materials

Terms associated with ICF categories have been gathered during 3 separate ICF use experiences:

1) ICF training events and linguistic exercises in South Africa;
2) Functioning profiling from records of stroke patients in New Zealand;
3) Preliminary work on a National project on assistive devices in Japan

The resulting uncleaned word strings associated to 1416 ICF categories (first to third level) were collected thanks to the function mapper resource.
To test the feasibility and efficiency of manually curating the standing word-set an experiment was run during the 2024 FDRG mid-year meeting.
10 groups of 2 to 4 ICF knowledgeable participants each analysed the recorded related terms associated with 50 second level ICF categories. The group work followed commonly agreed sorting rules and agreement among the group members was required.
The results were discussed and grouped according the their identified nature:

- Synonyms;
- related impairments;
- narrower terms.

Results

Chart 1: Ordered list of ICF categories, automatically assigned related terms (yellow) and curated extracted terms positioned in the 3 possible categories (Synonyms, Related impairment, narrower terms). In grey terms that albeit logically connected, cannot function as index terms being more closely related to other entities (e.g. ICF body structure). Different shades of background identify different working groups.

up	ICF code	ICF Code Title	ICF Definition	ICF Inclusion Terms	ICF Exclusion Terms	Considerations	No	FM Related Terms & Phrases [Seperated by |]	Synonymus	related impairment	narrower term	to be deleted
1	b110	Consciousness functions	state of awareness and	state, continuity and quality of	functions (b114); energy and	Being conscious		awake and aware|Mental events: [doubt]|When the mind is				
1	b114	Orientation functions	knowing and ascertaining	orientation to time, space,	functions (b110); attention	Orientation functions		space|Being aware of the self|Being aware of other				
1	b117	Intellectual functions	required to understand and	intellectual growth; intellectual	(b144); thought functions (b160);	Intellectual functions		learn|The brains capacity to understand|The brains capacity				
1	b122	Global psychosocial functions	they develop over the life span,	other relationships including		Global psychosocial functions		functions|Thinking|Feeling|Sensation|Intuition|Perceiving|J				
1	b125-CY	functions	particular way, characterizing	adaptability, responsivity,	functions (b117); energy and	functions		level|Level of activity|Quantity of activity|Amount of				
2	b210	Seeing functions	sensing the presence of light	functions; visual field functions;	(b156)	Seeing		difference between colours|Colour perception|Seeing				
2	b215	adjoining the eye	around the eye that facilitate	muscles of the eye, eyelid,	(b210); Chapter 7	Inner and outer eye functions		duct|Iris|Pupil|Sclera|Cornea|Lens|Medial rectus				
2	b220	eye and adjoining structures	itching eye and related feelings.	behind the eye, of something in	(b280)	outer parts of the eye		buss|Grains|Sand|Foreign objects in the				
2	b230	Hearing functions	sensing the presence of	hearing, auditory discrimination,	functions (b156) and mental	Hearing		difference in pitch|Able to hear where sound is coming				
2	b235	Vestibular functions	ear related to position, balance	position and positional sense;	associated with hearing and	Inner ear sensory functions		orientation|Dizzy|Middle ear				
3	b310	Voice functions	Functions of the production of various sounds by the passage of air through the larynx.	production and quality of voice; functions of phonation, pitch, loudness and other qualities of voice; impairments such as aphonia, dysphonia, hoarseness, hypernasality and hyponasality	Exclusions: mental functions of language (b167); articulation functions (b320); alternative vocalization functions (b340)	Functions of the voice sound		sounds|losing my voice|Voicebox|Vocalize|Make sounds|Verbal|Talk|Sing|Whisper|Laugh|Scream|Hum|Sore voice|Vocal tract|Vocal chords|Quality of voice|Vocal quality|Vocal pitch em|Vocal tone|Clear voice|Soft voice|Loud voice|Rough voice|High voice|Low voice|Thin voice|Raspy voice|Stuttery voice|Quaky voice|Breathy voice|Creaky voice|Falsetto voice|Full voice|Normal properly|Making the right sounds|Fluent vocal speech|Fluency and rhythm of speech sounds|Panting|Giggling|Hiccuping|Moaning|Wailing|Mimic	Vocals Voicing Vocalize Expelling of air through the voice-box|Making vocal sounds	losing my voice|Raspy voice|	voice|Vocal sounds|Talk|Sing|Whisper|Laugh|Scream|Hum Quality of voice Vocal quality|Vocal pitch em|Vocal tone|Clear voice|Soft voice|Loud voice|Rough voice|High voice|Low	Vocal tract|Vocal chords, lungs,ocal chords|Muscles of the larynx|ocal folds|Articulators|Having a voice|Voice-box|Larynx|Thyroid cartilage|Adams apple Oro-nasal
3	b320	Articulation functions	speech sounds.	enunciation, articulation of	language (b167); voice	sound		Motor speech|Other specific voice and speech functions				
3	b330	functions	flow and tempo of speech.	rhythm, speed and melody of	language (b167); voice	Speech fluency and rhythm						
3	b340	functions	other manners of vocalization.	production of tones and range	language (b167); voice	Other ways of using the voice						
3	b398	other specified				speech functions						
4	d115	Listening	Using the sense of hearing intentionally to experience			Listen		give an ear to|To lend an ear to|To hang onto words|To		To eavesdrop|To overhear	To pay attention to|	
4	d120	Other purposeful sensing	senses intentionally to			Sensing things on purpose		a whil|Sensing|To breathe				
4	d130	Copying	basic component of learning,	of an action or behaviour		Copying		duplicate a letter|To replicate|To follow a movement|To			replicate|To reflect an	something else|Playing make
4	d131	objects	actions on a single object, two		carrying, moving and handling	Practical learning		physical objects|Learn by applying the actual thing|Learn to			getting, gaining, assimilating, or	system|Attaining fluency in a
4	d132	Acquiring language	represent persons, objects,	re-acquisition of language	additional language [d133];	Learning a language		speak|Learning to utter words|Learning to				
5	d815	Preschool education	organized instruction in the			Preschool education		education, learn, apprehend, comprehend, get knowledge,				
5	d816-CY	activities	related activities, such as			activities		others|To go on excursions with others|To go on				
5	d820	School education	education; engaging in all			School education		schoolwork'|Learning lessons at school|Completing				
5	d825	Vocational training	vocational programme and			Vocational training		center|To go to trade school|To do learnership|To do				
5	d830	Higher education	advanced educational			Higher education		awarded, win, or earn one"s certificate, professorate,				
6	d910	Community life	community social life, such as	associations; ceremonies	employment (d855); recreation	social life		events|To attend music events|To help at soup		help around|To cooperate|To		
6	d920	Recreation and leisure	recreational or leisure activity,	and culture, crafts, hobbies and	transportation (d480);			activities|sightseeing|relaxation|amusement|To appreciate				
6	d930	Religion and spirituality	activities, organizations and	and spirituality		Religion and spirituality		fulfillment|Finding meaning|To engage in religious	Diversion, relasation, amusement beliefs|To engage in religious activities|To		To appreciate visual arts, to	Making things	Narrower term "to do", must to
6	d940	Human rights	internationally recognized rights		citizenship (d950)	Human rights		autonomy or democracy|To have no segregation|To have			meaning|To be a Jehovah"s		
6	d950	Political life and citizenship	and governmental life of a		Exclusion: human rights (d940)	Political life and citizenship		political duties|To have citizenship|To have protection|To			as everyone else|To follow		
7	e110	personal consumption	object or substance gathered,	water		Food, drink and medicine		supplements|Alcohol|Pills|Medication|Carbohydrates|Prot			candidate|To vote|To perform	someone from office|	
7	e115	personal use in daily living	technologies used by people in	assistive products and	technology for personal indoor	Things used every day		living|Having a chair to sit in|Having the tools to					
7	e120	personal indoor and outdoor	technologies used by people in	assistive products and		outside the home		me move|Having things to help me get around|Having my					
7	e125	communication	technologies used by people in	assistive products and		All things for communicating		translator|Telephone|Intercom|GPS|Hearing					
7	e130	education	processes, methods and	assistive products and		education		aid notepad|Laptop|Paper|Short courses|Internet					
8	e210	Physical geography	bodies of water.	geography included within		process and shape		Karst|Lacustrine|Mountain|Glacial|Slope|Tectonic|Volcanic					
8	e215	Population	given environment who share	change; population density		an area		s|Denizens|Dwellers|Folk|Natives|Residents|Young|Old|Trib					
8	e220	Flora and fauna	Plants and animals.		animals (e350); population	The natural surroundings		life|Rivers|Forest|Creature|Crop|Greenery|Vegetation|Vinb					
8	e225	Climate	events, such as the weather,	humidity, atmospheric		weather		pressure|Precipitation|Wind|Seasonal					
8	e230	Natural events	changes that cause disruption			Natural events		eruption|Flood|Wildfire|Typhoon|Cyclone|Limnic					
9	e310	Immediate family	marriage or other relationship		(e315); personal care providers	Immediate family		|Child-Bloodline|Genealogy|Kindred|Relatives|Wife|In-me|Having kids to go with					
9	e315	Extended family	family or marriage or other		(e310)	Extended family							
9	e320	Friends	ongoing participants in			Friends		work|Colleagues|Acquaintance|Shopkeeper|Teacher|Priv					
9	e325	colleagues, neighbours and	each other as acquaintances,		organizational services (e5550)	Peers		ual					
9	e330	People in positions of authority	making responsibilities for			People in authority							
10	e340	personal assistants	services as required to support		(e310); extended family (e315);	People who help you		assistant|Tapist|Apprentice|House sitter|Car guard|Call					
10	e345	Strangers	and unrelated, or those who			Strangers		body|Foreigner|Guest|Immigrant|Incomer|Interloper|Intruder					
10	e350	Domesticated animals	emotional, or psychological		assets (e165)	Pets		hasn"t met|People one doesn"t					
10	e355	Health professionals	within the context of the health		(e360)	Health workers		nake|Horse|Donkey|Ass|Mule|Ferret|Guinea					
10	e360	Other professionals	outside the health system,		(e355)	Other professionals		friend|Docile animals|Trained					
								sical therapist|OT|PT|Occupational therapist|Speech					
								technician|Actuary|Advertising account					

The original data source counted an average of 49 terms for each category.
The groups identified a variable number of potential new index terms in different proportion according to the identity assigned. For each analysed category the groups identified: 2 to 5 synonyms, 2-5 related impairments (mostly in body function codes), 30 to over 50 narrower terms.

Conclusions

Starting from ordered collections of natural language expressions (words or phrases) connected to specific identifiable ICF codes it is possible by a mixed automatic / manual approach to extract useable index terms that, appropriately positioned as synonyms, related impairments or narrower terms could substantially enrich the ICF associated terminology without weakening but on the contrary strengthening the conceptual framework of the classification.
This pilot experiment needs now to be extended to all ICF categories listed in the function mapper and may be replicated on datasets originating from different sources and ICF use cases.

Acknowledgements

The effort of all subjects contributing to the original word thesaurus is gratefully acknowledged.
The contribution of all FDRG members taking part in the Mexico City experiment is acknowledged.