ICF EDUCATION

ICF AT TWENTY-FIVE

PROJECTS FROM AROUND THE WORLD

Celebrating real-world uses of the International Classification of **FUNCTIONING, DISABLILITY** and **HEALTH**

ICF EDUCATION

Editors: Catherine Sykes & Huib Ten Napel

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Celebrating real-world uses of the International Classification of Functioning, Disability and Health

The International Classification of Functioning, Disability and Health (ICF) is a statistical tool developed by the World Health Organization (WHO) and its network of collaborating centres for the Family of International Classifications (WHO-FIC Network). It was endorsed by the World Health Assembly on 22nd May 2001. The iterative and collaborative development involved academics, health and welfare administrators, statisticians, health professionals and, importantly, people with disabilities and their representative organisations.

As a new classification people needed to learn about how it could be used for a range of purposes. In the early years publications focused on introducing the classification to their readership and ICF e-learning was produced by the Education and Implementation Committee (EIC) of the WHO-FIC Network.

As more that people got to know about the ICF so increased the demand for education about how to translate theory into practice using the classification to build ICF based data collections. The online portal ICFEducation.org was developed to share resources and provide access to ICF advisors and educators as one way to meet the need. A course for ICF facilitators was developed and promoted on the portal. Building on a course developed in the Netherlands in 2015 and the translated courses run by the ICF Education coaches in Africa, India and South Korea, the ICF facilitators course was delivered as a blend of face-to-face workshops followed by 6 months of interactive online education. Since 2020 the course has been delivered entirely online. A total of 129 participants from 24 countries from all regions of the world have completed the course.

The end point of the course is the delivery of a 'Final Project' by the participants operationalising ICF in their own context. Participants have summarised their final projects into one-page documents for inclusion in this celebratory publication.

We would like to celebrate twenty-five years of ICF by showcasing what these dedicated people have done to improve people's functioning by using the ICF in their own countries and situations. We hope that you enjoy reading about these innovative applications of ICF.

Thank you to all the participants for their continued commitment to ICF use and sharing their stories about how they have done so.

ICF Facilitator Course Coaches:

Huib ten Napel (WHO-FIC Collaborating Centre in the Netherlands),
Stefanus Snyman (WHO-FIC Collaborating Centre in South Africa),
Catherine Sykes (University of Sydney, Australia)
Michelle Janse van Rensburg (University of the Witswatersrand, South Africa)
Haejung Lee (WHO-FIC Collaborating Centre in the Republic of South Korea),
Thomas Maribo (Aarhus Universitet, Denmark) (joined the team in 2026).

Guest lecturers:

Jerome Bickenbach (Swiss Paraplegic Research)
Olaf Kraus de Camargo (CanChild Centre for Childhood Disability Research, Canada)
Matilde Leonardi (WHO-FIC Collaborating Centre in Italy)
Peter Rosenbaum (CanChild Centre for Childhood Disability Research, Canada)
Hillegonda Stallinga (University of Groningen, The Netherlands)

More information on the ICF Facilitator Course

Over the course of the program, we delve into the following topics:

Module 1: Introductions and reflection on present knowledge
In this module, you will assess and reflect on your existing knowledge of the ICF. What were your prior insights, and what new knowledge have you gained through the course?

Module 2: Introducing the ICF and finding your way about
This module focuses on positioning yourself within the ICF framework at the component level. Understanding ICF requires the ability to describe yourself in terms of ICF, and this module will guide you in doing just that.

Module 3: Coding with ICF
In this foundational exercise, you will learn to categorise terms and phrases within ICF components and classes. You'll also explore the reasons behind classification and the methods involved.

Module 4: The basics of using ICF in a clinical setting
This module you will learn how to analyse a practical case and use the ICF browser for classification. The emphasis is on gaining insight into the structure of ICF and learning how to navigate it effectively.

Module 5: WHO Family of International Classifications (WHO-FIC)
In clinical practice, you may need to code health conditions (ICD-11) and health interventions (ICHI). This module provides a brief introduction to these classifications, expanding your knowledge beyond ICF.

Module 6: ICF as catalyst for interdisciplinary collaborative practice
We will utilise case examples from around the world on how to organise ICF data for interdisciplinary collaboration

Through global case examples, you'll discover how to organise ICF data to foster interdisciplinary collaboration, enhancing your ability to work across different domains.

Module 7: ICF in the context of ethics, human rights and legal frameworks
Engage in robust discussions about the benefits and drawbacks of using ICF. Learn how to leverage ICF as an advocacy tool to drive positive change.

Module 8: ICF in measuring instruments
Develop critical thinking skills when it comes to code sets and their application.

Module 9: Contextualising ICF health record and data collection forms
Evaluate and enhance your own data forms to seamlessly incorporate ICF principles.

Additionally, you'll have the opportunity to choose one of three electives

- Elective 1: Teaching about the ICF
- Elective 2: Applying ICF in clinical practice
- Elective 3: Develop an ICF based data collection

To enrol go to https://icfeducation.org/icf-facilitator-course/

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Available on the ICF Education Portal: http://icfeducation.org

Celebrating 25 years of ICF: Impact of interactive online education

Ten Napel H[1], Snyman S[2], Sykes C[3], Janse van Rensburg M[4], Lee HJ[5], Maribo T[6]
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Abstract Since 2015, ICF education has been made available through the ICF Education portal. The portal has been used to deliver an interactive online course. The participants present final projects demonstrating the use of ICF. The impact of ICF is demonstrated through these projects.

Background

Despite the years since the ICF was published there is still a high demand for education about the classification and, importantly, how to use it in practice.

ICF education has been made available through the ICF Education portal, hosted by the Collaborating Centre (CC) in South Africa (www.ICFeducation.org).

It is now 25 years since the ICF was published and we are celebrating the changes in that time by presenting some of the final projects of the participants in the online course and the workshops that predated it.

Interactive online education

The ICF Facilitator course builds on one first developed in 2007-2008 by the CC in the Netherlands. The course was presented face-to-face for 10 years. Participants were introduced to the principles of ICF use and practical application in the field.

Similar workshops were conducted by the ICF Education coaches across Africa, in India and in South Korea

From 2018 the course was translated, updated and enhanced with modules to address specific uses of ICF.

The course was presented as a two-day face-to-face introductory module, followed by 6 months of online interactive education. Following COVID the course moved to online only.

The course

The aims of the course:

- Deepen knowledge and insight into ICF.
- Solidify understanding of the core principles and content of ICF.
- Explore the potential and limitations of ICF's practical applications.
- Demonstrate ability to transfer acquired knowledge and insights to a specific area of expertise.

The teaching methods emphasise meaningful and application-oriented learning through live online discussion, readings, assignments, reflective exercises, presentations, and practical decision-making.

Assignments cover knowledge acquisition, comprehension, implementation, analysis, synthesis, and evaluation.

A team of coaches from South Africa, the Netherlands, Australia, South Korea and Denmark facilitate the learning. Guest speakers contribute their practical expertise or provide specialised guidance to participants.

Outcomes

A total of 10 online courses have been conducted with 129 participants from 25 Countries: Austria, Cambodia, Canada, Chile, Croatia, Denmark, Estonia, Finland, Germany, Greece, Hong-Kong, India, Israel, Japan, Kazakhstan, Kenia, Netherlands, Nigeria, Rwanda, Saudi Arabia, South Africa, Turkey, United Kingdom and Vietnam.

The majority have been allied health professionals (83%) educators (5%), nurses (5%), health administrators (4%) and medical doctors (3%).

Final assignment examples

Course participants present their use of ICF, for a purpose they have identified, in a final report. Examples of applications incorporating ICF in:

- Interprofessional (Physio, Occupational and Speech therapy) clinical guidelines for Universal Health Coverage (South Africa)
- A new national multi-disciplinary assessment for vocational rehabilitation plus an education program for the personnel who will record the assessment (Croatia)
- A review of assessment tools for breast cancer survivors (India)
- Interprofessional education curricula (INPRO, Europe)
- Electronic health records in Nigerian academic hospitals (Nigeria)
- Interprofessional summary reports on functioning of children with Cerebral Palsy for Medico-Legal purposes (UK)
- A framework to establish a Childhood Development Service within a new National Hospital (Cambodia)
- A Short ICF Subset for Stroke Survivors Using the Nominal Group Technique (Hong-Kong)
- Integrating Case-Mix Model & ICF into Electronic Health Record systems: Enhancing Stroke Rehabilitation through Personalized care (India)

Conclusions

1. All the projects are driven by the felt necessity or need for a broader perception on health, including functioning.
2. Several projects show innovative use of the ICF and are show-case examples of the application of Functioning in different practices. These could well serve as case studies in the ICF reference guide.

Acknowledgements

The Coaches thank the CCs who have donated funds, those who have shared their educational materials, the participants in the Facilitators course for their feedback to improve the course and for contributing their final projects for this publication. endeavour.

ICF Facilitators

'Integrating Case-Mix Model & International Classification of Functioning, Disability & Health into Electronic Health Record systems: Enhancing Stroke Rehabilitation through Personalized care, Predictive analytics & Resource optimization'

Group: March 2025

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Mumbai, Maharashtra, India

Abstract Integration of the International Classification of Functioning (ICF), Case-Mix Model (CMM), and Electronic Health Records (EHR) is proposed as an evidence-based framework to improve functional outcomes, continuity of care, and resource optimization in stroke rehabilitation. This approach is intended to address the growing complexity of stroke rehabilitation and help to improve personalised care, resource allocation, predictive accuracy, and clinical decision-making by providing a comprehensive, evidence-based solution.

Background

- Stroke is the leading cause of adult disability worldwide, requiring long-term, multidisciplinary rehabilitation. Current healthcare systems lack standardised frameworks for documenting functional outcomes and environmental influences on recovery.
- ICF is a bio-psycho-social model widely acknowledged in rehabilitation medicine and a promising direction in patient-centred care. ICF classification reflects assessment at the level of impairments, activity limitations, and participation restrictions, and adding qualifiers helps study health outcomes more objectively and precisely.
- The ICF provides a validated assessment framework for understanding disability, while EHR systems enable longitudinal data capture and interoperability.
- Case-Mix Models facilitate grouping of patients based on functional status, which in turn helps identify intervention targets, predict outcomes, and inform resource utilisation.
- EHR with clinical decision support and predictive analytics helps in planning it. Technical innovation and standardisation in healthcare record systems, translating into improved personal and public health is emerging and promising.

Inciting incident

Epidemiological and clinical evidence indicate that although stroke survival rates have improved, a substantial proportion of patients experience long-term disability and are lost to follow-up due to inadequate documentation of functioning and poor continuity of rehabilitation care. This highlighted a critical gap in existing health systems, which predominantly focus on acute medical management rather than longitudinal functional recovery.
There is a need for rehabilitation-relevant classification for clinically similar groups of individuals based on functional outcome measures, and documentation that predicts resource requirements, use and outcomes. Nascent tools indicate the use of ICF for case-mix models; however, it is far from established, rather than existing models. EHR is in its infancy stage, at least in India. Despite reported benefits, the adoption of EHR is low; the availability of an extensive or fully functional EHR is scarce.
Individually, all three viz. ICF, EHR & CMM have a central premise to support quality health care; while they also share common goals and strategies. Thus, it can be hypothesised that by integrating all of them this potential can become manifold.

Aspiration

This study aims to develop a template for an EHR system with the integration of two key frameworks- CMM and the ICF, to be adopted for stroke rehabilitation.

The specific objectives are-
- To standardize the assessment of functioning across impairment, activity, and participation domains
- To enable predictive analytics for prognosis and individualised care planning
- To optimise healthcare resource allocation using case-mix stratification
- To enhance patient-centered, bio-psycho-social rehabilitation models

Challenges

- Limited awareness and implementation of ICF in clinical practice
- Limited knowledge of CMM
- Financial and infrastructural barriers to EHR adoption
- Increased documentation burden perceived by healthcare professionals
- Lack of interoperability and standardized data systems, need to revise medical rehabilitation terminology and coding standards
- Need for coordinated multidisciplinary collaboration within and across healthcare settings

A key decision involved transitioning from fragmented, disease-centred systems to an integrated, function-based model despite implementation constraints.

Resolution

An integrated framework combining ICF-based assessment tools, Case-Mix classification, and EHR infrastructure was developed.
The theoretical construct for this framework and design was derived from -
- Rehab-cycle
- ICF-based documentation tools - ICF core set for stroke, ICF Qualifiers
- WHO Disability and Assessment Schedule 2.0 (WHODAS 2.0)
- Generic set for rehabilitation measurement
- Standardised Stroke management guidelines
- EHR Standards by the Government of India (updated 2016)
- It also employs ICD-11 and ICHI, representing an ideal modular set of classification systems.

Important capabilities/functionalities:
- Clinical decision making using an individualised contextual approach (ICF)
- Categorising individuals based on functional outcome measures (Case- Mix Model)
- EHR with artificial intelligence has predictive analytical ability; interoperability with other systems, such as Clinical Decision Support, m-Health technology, and wearable devices, enhances its utility.

This model supports standardised documentation, individualised rehabilitation planning, and data-driven clinical decision-making. It enables tracking of functional recovery, improves continuity of care, and facilitates efficient resource utilisation.
The framework also establishes a foundation for outcome research and policy development. This integrative model has the potential to transform health care settings and health information systems.

Link or QR code

- WHO ICF Framework: https://www.who.int/standards/classifications/international-classification-of-functioning-disability-and-health
- Indian EHR Guidelines: https://esanjeevani.mohfw.gov.in/assets/guidelines/ehr_guidlines.pdf
- https://www.icf-casestudies.org/introduction/introduction-to-icf-based-documentation-tools-and-rehab-cycle-2/introduction-to-icfbased-documentation-tools-and-rehab-cycle
- https://www.jmir.org/2005/1/e3/
- https://www.tandfonline.com/doi/full/10.1080/09638288.2018.1431812
- https://pubmed.ncbi.nlm.nih.gov/12392234/
- https://scispace.com/papers/icf-linking-rules-an-update-based-on-lessons-learned-4m813zsi50
- https://pubmed.ncbi.nlm.nih.gov/18762742/

What was learned

- Bio-psycho-social approaches improve rehabilitation assessment and outcomes
- Standardized frameworks enhance transparency and comparability in clinical data
- EHR systems enable predictive analytics and longitudinal outcome tracking
- Successful implementation requires alignment with clinical workflows and adequate training

Implication: Incremental implementation with multi-stakeholder engagement and collaboration is critical for sustainability.

Next steps

Clinical and statistical validation of the EHR model against the anticipated benefits
- Pilot implementation and clinical validation in hospital and post-acute settings through multicentric studies
- Development of regional and national rehabilitation databases
- Establish benchmark norms for clinical indicators and integration of artificial intelligence for predictive modeling
- Ensuring compliance with data security, ethical, and legal standards
- Integration into healthcare policy and quality assurance programs
- Scaling for national and international adoption with contextual adaptation

It is assumed that it will be a meaningful & practical system enabling data-driven healthcare delivery that can be used by health policy quality assurance evaluation outcomes. Ultimately, the model has the potential to enhance stroke rehabilitation outcomes, improve patient quality of life, and contribute to healthcare system efficiency, making it a crucial area of investigation in modern healthcare.
Further research is directed to justify the use of ICF and CMM in resource usage and recovery monitoring in long-term rehabilitation of patients with stroke.

The Rehab-Cycle®® and the corresponding ICF-based documentation tools

Acknowledgements

This work is based on the International Classification of Functioning, Disability and Health (WHO, 2001) and supported by evidence from rehabilitation science and health informatics literature.
I sincerely thank ICF Facilitators Course coaches for their guidance and contribution to advancing the ICF framework and its role in modern rehabilitation.

ICF EDUCATION

Can AI help operationalise the ICF in everyday clinical practice

Group: May 2024

Vaia Arsenopoulou
Theotokos Foundation, Greece

Abstract Meaningful innovation lies in human–AI collaboration for the operationalisation of the ICF in clinical, rehabilitation and education settings.

Backgound

Theotokos Foundation is an Early Childhood Intervention, VET and Supported Employment service provider in Athens, Greece. We have used an ICF-based digital profile since 2015 to describe the functioning of children and young adults with IDD & ASD. Discipline-specific forms contain a locally developed ICF subset. Each professional assigns a qualifier to the categories in their form and the results appear on discipline-specific profiles and also on a combined profile, which is colour coded to show each discipline. Person-centered planning is based on a goal bank in which every long-term goal is linked to an ICF category. Despite the structured system, increasing time constraints, staff turnover and varying training have led to inconsistent coding, fragmented use of ICF data, and reduced interdisciplinary integration for intervention planning.

Inciting incident

A decade of using ICF-based tools has promoted a more holistic approach to service provision, however process reviews show that inter-professional data is underutilised and detailed, accurate documentation is time-consuming.

The rapid emergence and widespread accessibility of generative AI tools prompted a critical question:
👉 Can AI help operationalise the ICF in everyday clinical practice, as it was intended: holistically, collaboratively, and efficiently?

Aspiration

Our goal was to investigate whether an AI-assisted workflow could speed-up documentation, increase coding accuracy and make the biopsychosocial model visible for all team members.

The ultimate goal was to promote interdisciplinary collaboration and facilitate realistic person-centred intervention planning, by AI-driven interdisciplinary synthesis together with a holistic approach to goal-setting.

Challenges

The reports contained:
- inaccurate and non-existent codes
- hallucinated category titles and definitions
- misleading justifications
- links restricted to broader 2nd level categories

On average 7 prompt iterations and 10-30 micro-edits were required per profession to reach a satisfactory report and summary table of categories and qualifiers.

The AI was repeatedly challenged to be more granular and to justify choices.

Resolution

A refined generic prompt was created and utilised to perform the tasks of analysing data from formal and informal assessments, interviews and observation reports.

The uni-professional reports generated were supplemented by a summary table of categories, qualifiers and their justification with specific reference to the inputted data.

Deep analysis of the ICF's hierarchy should guide the AI, forcing 3rd and 4th level precision to prevent vague mapping.

Requests for transparent justifications and the use of review and validation in multiple sessions with the same task led to the AI learning and generating more accurate reports.

Repetition and correction improved output and the AI "learned" through structured feedback.

What was learned

Human-in-the-loop is essential and AI cannot replace:
- clinical reasoning
- interdisciplinary judgement
- contextual interpretation

Prompt-engineering with ChatGPT reduced the time needed to convert interdisciplinary assessment data into accurate, category and qualifier-rich ICF reports.

Robust mapping of assessment tools to ICF categories has to be included in prompts and should precede the creation of templates with specific links for AI to use.

Next steps

Use generic prompt to obtain intra-professional coding consensus through repeated use-cases.

Develop templates with meaningful concepts and assessments tools linked to ICF codes for AI use.

Embed mapping and linking system into current EHR via an API to visibly show the interrelatedness of the ICF components on the functioning profiles.

Develop AI-driven linking of d-codes with impacting b-codes and e-codes for trainers to fully utilise data when planning intervention.

For the Greek language ICF version further clarify category titles and definitions.

Acknowledgements

Yannis Papakonstantinou, Scientific Director at Theotokos Foundation and colleagues collaborating in this project: Afroditi Korogiannaki, Chrissi Kotretsou and Maria Ntzelepi.

ICF EDUCATION

Functioning of Indian Women in the Postpartum Period: An ICF-Based Exploratory Study of Postpartum Females residing in Mumbai & Navi Mumbai

Group: May 2024

Dr. Anu Arora,PhD (PT),
D.Y.Patil University,Navi Mumbai, Maharashtra, India

Abstract The exploratory study uses the ICF framework to map Indian women's postpartum functioning to reveal culturally specific, multidimensional challenges that can inform comprehensive, patient-centred Physiotherapy care.

Backgound

Postpartum period significantly impacts daily activities, psychological well-being, sexual function, and overall quality of life.

Though there has been substantial global usage of ICF in various domains, it has not been applied specifically to map the functioning of Indian women during the postpartum period.

ICF bio-psycho-social-spiritual framework which emphasises health as an outcome of physical, psychological, environmental, and social interactions & cultural beliefs, can very well fill this need by documenting postpartum functioning and thus addressing patient-reported goals.

Inciting incident

Clinically, we found that the new mothers attending Physiotherapy presented with highly diverse and culturally layered challenges — pain, fatigue, emotional distress, family expectations, traditional practices.

Our existing biomedical frameworks are inadequate to capture these in a holistic manner.

This observation inspired our research question: Can the ICF framework be used to comprehensively document the functioning of Indian women in the postpartum period?

Challenges

Semi-structured interviews on sensitive topics like emotional health, sexual function, body image required building trust and careful facilitation. It was also challenging for the new mothers to allocate time for the interviews from their already busy schedules with the baby care responsibilities.

Mapping rich qualitative narratives to specific ICF codes demanded iterative review, which was ensured through expert verification.

Resolution

A qualitative exploratory study of 17 postpartum women (age 19–39 yrs; 9 primiparous & 8 multiparous; 9 LSCS & 8 FTND; diverse SES and family types).Thematic analysis revealed six major themes:

1. **Physical Health** — pain (back, sacral, episiotomy), fatigue, hair loss (ICF: b28013, b28016, b1302, b134, b850)
2. **Sleep** — fragmented sleep < 4 hrs, heightened anxiety (ICF: b134, e310)
3. **Emotional & Mental Health** — mood swings, anxiety, body-image concerns, coping strategies (ICF: b152, b1522, b126, d240)
4. **Social & Family Support** — family contributions vs. conflicting traditional advice (ICF: e310, e410, d660)
5. **Childcare** — breastfeeding challenges, balancing traditions and medical guidance (ICF: d660, b1260, e580)
6. **Work-Life Balance** — role strain, employment decisions, career pauses (ICF: d850, d845, e310)

What was learned

Postpartum functioning is a dynamic and complex interplay of biological, psychological, and contextual factors. Indian household norms, joint-family dynamics, and traditional postpartum practices (e.g., 'confinement' period, oil massage, dietary rules) significantly shape functioning and can be effectively captured using the ICF framework in a standardised yet person-centred way.

Advice: Begin with a broad interview guide, allow saturation to define your sample size, and involve clinicians in ICF code verification to ensure ecological validity.

Next steps

Improve generalisability by including women from rural areas, diverse states, and underserved socioeconomic groups
Develop and validate a **standardised ICF-based postpartum assessment tool** for physiotherapists in clinical practice across India.
Disseminate findings to physiotherapy educators and integrate the ICF-postpartum framework into clinical training curricula.

Domains Affecting Postpartum Functioning in Indian Women: A Thematic Framework

Aspiration

To gain an in-depth understanding of postpartum functioning from the perspective of Indian women across body functions & structures, activities & participation, and contextual (environmental & personal) factors.

Link or QR code

Final Assignment & Presentation: Available on request from the author.
Contact: Dr. Anu Arora, PhD(PT)
D.Y. Patil University, Navi Mumbai,India anu.arora@dypatil.edu

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ICF Facilitators Course Program and mentorship.
Study Participants who generously shared their experiences.
D.Y. Patil University, School of Physiotherapy, Navi Mumbai for institutional support.

ICF EDUCATION

Clinical Application and Feasibility of Using ICF Cancer Survivor Core set to the health condition of a post-menopausal Breast cancer survivor

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Group: March 2020

Abstract

The case report is of 52-year-old female complaining of fatigue, depression post modified radical mastectomy. She was under four weeks of exercise program. The purpose of this study was to consider clinical application of ICF Cancer survivor core set to describe the health condition by mapping the components of assessment tools used in this study.

Backgound

The subject is JM, a 52year-old, post menopausal female, working as an attendant in college. JM was diagnosed with duct carcinoma of the left breast. She underwent modified radical mastectomy and six cycles of chemotherapy post surgery. She complained of extreme fatigue and depression which made it difficult for her daily household activities and was unable to go back to job for one year which created financial drain for her. After taking informed consent, the pre-intervention scores for outcome measures were taken. The outcome measures used for the assessment were; the revised Piper fatigue scale, Beck's depression inventory, Functional assessment of Cancer therapy questionnaire for breast cancer, and 6-minute walk test. The patient was given a structured program of modified version of Hatha yoga for four weeks. After four weeks, there was improvement in the score of outcome measures.

Inciting incident

1.The Comprehensive ICF Core set for breast cancer describes the categories of Body structure (9), Body function(26), Activities and Participation (22), Environmental factors(23). But the core set has not been validated yet, thus the uncertainty if the selected domains are comprehensive to cover the experience of functioning of breast cancer survivor. Also, the long term, post treatment issues may be different to those identified in acute and immediate post acute cases. Thus, the need to use Cancer Survivor core set in this study.

Aspiration

1. To assess the coverage of the Cancer Survivor Core set by maping the items from a range of assessment tools used in the clinical situation to the ICF using linking rules.
2. To identify the categories that are important for the people who are recovering from breast cancer, those that are missing ,overlap or are inconsistent with the ICF and that those that cannot be documented using the ICF.

Challenges

1. It was challenging to map the large number of items from the four outcome measures used for the assessment purposes to the ICF framework to know if it was possible to link all the questions; any gaps and duplication across the outcome measures.
2. Validation of the mapped data from the subject expert was also a rigorous process.
3. Identifying suitably qualified people to conduct an independent review of the work. It was elected to have an ICF knowledgeable person, with limited knowledge of breast cancer rather than vice versa.

Resolution

Methodology

1. Identify the functioning concepts
2. Map the concepts to ICF according to the maping method described by Cieza.et.al
3. Independent review of mapping by a subject expert who was an additional investigator in agreement with mapping.

Results

Tables of the description of functioning of patient in the ICF format by using ICF Cancer Survivor Core set and the mapping results of all the outcome measures used in the study for the self reported health condition of patient are described in the link to the published article of this study.

What was learned

1. Key body functions like fatigue, exercise tolerance was missing.
2. QOL is complementary .WHO-QOL was used.
3. YOGA intervention was an important facilitator
4. Duplication of concepts across assessment
5. Multiple concepts in one assessment question.
6. Satisfaction with participation is an important concept and can be coded by using Australian qualifiers
7. Mapping items in generally used assessments to the ICF shows not only what is assessed but reveals what is missing from routine process.

Next steps

1. Cancer Survivor Core Set can be considered as a feasible tool in assessment and documenting the health status of breast cancer survivors. A similar study can be done in the future on larger number of survivors to confirm the results of this study.
2. However, common issues reported by breast cancer survivors like fatigue, reduced exercise tolerance and quality of life are not included in the core set for cancer survivors, so they needed to be considered separately or included in a revised core set specifically for breast cancer survivors.

Link

https://www.onlinescientificresearch.com/journals/jgyrr/archives/2025/7/7

https://pmc.ncbi.nlm.nih.gov/articles/PMC6134741/

Acknowledgements

I am thankful to my patient JM, for being part of this study. To my co-authors for their contribution to the article.
My heart felt gratitude to my coach, Catherine Sykes for her constant support, believing in me and encouraging me through out this project.

ICF Facilitators

The Aquatic Assessment and Goal Setting Evaluation Kit Based on ICF Principles, for Children with Developmental Delay

Group: March 2019

Merav Hadar-Frumer
Beit Issie Shapira, Israel

Abstract

This poster presents the development of an Aquatic Assessment and Goal Setting Evaluation Kit Based on ICF Principles, for Children with Developmental Delay and proposes next steps for a broader implementation.

Backgound

As professionals working in the aquatic environment (AE), we encounter the difficulty of combining the two environments: the "land" environment and the water. Specially to:

- **set daily activity goals for the children in everyday life ("land" environment), and**
- **match these goals with exercises in the AE**.

Existing aquatic assessments* only provide information about the child's abilities in aquatic environments. These different assessment tools do not lead the evaluator to set uniform goals for the child's participation and quality of life (QoL) in everyday life.

A suitable assessment tool was required to bridge the gap between the two environments.

*WOTA – Water Oriented Test Alyn (Tirosh et al., 2008); S.W.I.M - Swimming and Water Independence Measurement/Swimming With Independent Measure (Grolager et al., 2012); HAAR - Humphries' Assessment of Aquatic Readiness (Humphries , 2008); AIM - Aquatic Independence Measure (Chacham & Hutzler, 2002); CAASST - The Conatser Adapted Aquatics Screening Test (Conatser, 2009); AFAS - Aquatic Functional Assessment Scale (Israel et al., 2014).

Inciting incident

Learning about the International Classification of Functioning, Disability and Health (ICF), at a conference in 2017 in Ljubljana, I realized that ICF might be **the direction** for developing a questionnaire with a common language, and for getting to know the child before the Aquatic Activity (AA).

The first questions I encountered was: what expertise is required for being able to develop an assessment tool and how can that be achieved?

(Simeonsson 2009; Simeonsson et al., 2012; WHO 2001, 2002, 2007; Adolfsson et al., 2018)

Aspiration

I engaged in the ICF-Facilitators Course in 2019, which helped me to find directions for a research project to undertake. The aspiration was to develop a new questionnaire based on the ICF-CY model to assess and set goals in the areas of activities and participation for children aged 6-12 with developmental delay (DD) who participate in aquatic activities.

The questionnaire was constructed in 3 stages:

First, I needed to assess the feasibility of using the ICF framework and terminology as a unifying language for professionals and various measurement tools.

Then we assessed the accuracy of use of the ICF and ICF-CY frameworks in the AA professional world for children with DD.

The last stage = constructing the questionnaire, as demonstrated in the image.

Challenges

As I decided to aim for a research project (PhD), my biggest challenge was to find the right people to support me throughout the long process and help me navigate the maze of the ICF framework and research in general.

And I was lucky to find them:

- **DR. Huib Ten-Napel** (WHO-FIC Collaborating Centre RIVM, The Netherlands)
- **DR. María José Yuste Sánchez and DR. Isabel Rodríguez Costa** (Alcala University, Spain)

Resolution

In 2025 I completed my PhD, resulting in a measurement tool based on the ICF-CY:

AQUA CHILD
pre-Aquatic Questionnaire Assessing Child Development

1. AQUA-CHILD is suitable, valid, and reliable as a concrete measurement of the child's A&P abilities in everyday life.
2. It allows the instructors to learn about the child's abilities, QoL, and challenges.
3. The parents can fill out the questionnaire themselves.
4. It enables the instructors to determine adapted intervention goals for the AA program, to promote the child's functioning in daily life.
5. Linking the positive goals of the different research to the ICF Framework is feasible.
6. It is possible to use the universal structure and language of the ICF framework to create a review of different research in the fields of AA for children with DD aged 6-12.
7. However: the familiarity of the researchers with the ICF Framework is still lacking.

Link or QR code

Frumer, M. H., Napel, H. T., Yuste-Sánchez, M. J., & Rodríguez-Costa, I. (2024). Design and validation of AQUA CHILD: Pre-aquatic questionnaire assessing child development. *Brain and Behavior*, *14*(10). https://doi.org/10.1002/brb3.70033

What was learned

For future researchers in the Aquatic Activity:

1. Utilize the ICF model holistically, ensuring all components are included for a comprehensive evaluation.
2. Be aware of the possibilities that exist in the ICF Framework as an evaluation tool.
3. Use uniform and selective tools for linking to the ICF.
4. Use ICF-CY or ICF for curriculum design and content.
5. Put more emphasis on the aquatic environment itself as a meaningful environment within the social and personal contexts.
6. Develop orderly models for clinical use of the ICF, to use uniform tools for linking study results to the ICF Framework.

Next steps

1. To make the questionnaire available for completion on a computer and phone.
2. To publish the questionnaire among experts in aquatic activities and ask them to translate and research it.

AQUA-CHILD VIDEO

A link to the questionnaire

https://meravhf.wixsite.com/hydrotherapy-merav/copy-of-aqua-child

Acknowledgements

I thank my amazing supervisors – Dr. Huib Ten Napel, Dr. Maria José Yuste-Sánchez, and Dr. Isabel Rodríguez-Costa.
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Exploring Clinician-Reported Assessments of Capacity and Performance Qualifiers in the ICF: A Scoping Review Protocol

Group: May 2024

Tobias Kaarsbo

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Geriatric Research Unit, Department of Clinical Research, Odense University Hospital and University of Southern Denmark

Abstract Clinician-Reported Assessments lack standardized approaches to assessing and rating capacity and performance using ICF qualifiers; this project maps existing approaches and identifies the gaps.

Backgound

The ICF provides a standardized rating system called "qualifiers" to describe functioning. Within the activity and participation component, these qualifiers reflect capacity (what a person can do) and performance (what a person actually does).

Despite the conceptual clarity of the ICF, the clinician-reported use of capacity and performance qualifiers remains both conceptually and methodologically unclear.
The ICF itself does not specify how qualifiers should be determined in practice and emphasizes the need for research-based assessment procedures.

To address this, this project focuses on clinician-reported assessments (ClinRAs), aiming to map how capacity and performance qualifiers are currently operationalized.

Inciting incident

Through my experience as a clinical educator in physiotherapy, I repeatedly encountered challenges in teaching and applying the ICF in practice.

In particular, the operationalisation of capacity and performance was difficult, and it was challenging to identify assessment approaches that were consistent with the strict definitions of ICF qualifiers as described in the ICF "Red Book".

This highlighted a gap between the theoretical framework and its practical application, which became the starting point for this project.

Aspiration

The goal of this project was to develop a scoping review protocol to systematically map clinician-reported assessments linked to the capacity and performance qualifiers in the ICF.

More specifically, the protocol aims to guide the identification of relevant assessment methods, required tools, target populations, and approaches used for development and validation.

Challenges

A key challenge was to define an applicable interpretation of the constructs of capacity and performance, as the ICF "Red Book" provides overlapping and partly ambiguous descriptions. This made it difficult to establish a consistent conceptual foundation for the review.

Another major challenge concerned defining the core concept of the review. To address this, the term ClinRA (Clinician-Reported Assessment) was introduced to distinguish clinician-derived assessments from purely patient-reported measures.

Resolution

To address these challenges, ClinRA was introduced as an umbrella concept to capture a broad range of clinician-derived assessments, including tests, measurements, structured observations, and interviews.

This was an explicit methodological choice, but also a limitation, as ClinRA is a novel and unvalidated concept that may overlap with existing constructs and affect comparability across studies.

In addition, following feedback from supervisors, the project scope was broadened from a narrow focus on categories within the mobility chapter to include all categories within the Activities and Participation component. This increased the conceptual relevance and applicability across clinical contexts.

Link or QR code

The project has been completed and developed into a scoping review, which was accepted for publication in Front. Rehabil. Sci., Human Functioning Science.

https://www.frontiersin.org/articles/10.3389/fresc.2026.1792865

REVIEW

Exploring Clinician-Reported Assessments of Capacity and Performance Qualifiers in the ICF: A Scoping Review

What was learned

Despite the extensive and valuable work underpinning the ICF, including the "Red Book", significant challenges remain in operationalising assessment methods of functioning in line with its principles.

In particular, important questions remain regarding how clinician-reported assessments (ClinRA) can be conceptualised and operationalised to support transparent, consistent, and valid assessment of capacity and performance qualifiers in the ICF.

Next steps

The FAIR initiative (Functioning Assessment, Implementation & Research Initiative) has been established to further develop ClinRAF and to support a more ICF-consistent understanding and application of functioning assessments in Denmark. The initiative is inspired by the LIFE initiative at the University of Lucerne.

Future work within the FAIR initiative focuses on its conceptualisation, core components, validity, integration of multiple data sources, and its potential to improve consistency and transparency in assessing capacity and performance.

A screenshot from my presentation of the final assignment as part of the ICF Facilitator Course:

Acknowledgements

From the accepted manuscript:
"*The first author (TK) extends special thanks to the coaches and participants of the ICF Facilitator Course 2024–2025 for their support and feedback in developing and refining the conceptual foundation of the protocol.*"

ICF EDUCATION

Using the ICF framework to describe the functional capacity of students with special needs in vocational education and training

MSc Riina Karvonen
Luovi Vocational College, Finland

Course: May 2024

Abstract This project explored how the WHO ICF framework can enhance vocational education by structuring students' functional capacities and their special educational needs during the studies. An action research process piloted the ICF-based RUORI self-assessment with 27 students from Business and Media and a multidisciplinary staff team. The outcome was a practical model for using the RUORI assessment tool early in studies to identify support needs, enhance student involvement in planning, and improve documentation and guidance practices.

Backgound

In Finnish vocational education, students who require special support often learn alongside their peers, yet their needs for assistance vary widely. Currently, documentation regarding these support needs is fragmented across various professional statements, which prevents a unified understanding of each student's functional abilities. The absence of standardized assessment practices results in inconsistent terminology and differing interpretations among students and professionals. To address this issue, a standardized, student-centered approach to describing functioning is essential, particularly at the start of studies when decisions about support and learning methods need to be made quickly.

Inciting incident

At the start of vocational studies, staff must identify students' support needs fast, yet existing tools do not specifically assess special support needs in vocational education. RUORI, an ICF based assessment method developed at Luovi, was selected to test whether a shared functional capacity description can improve early planning, guidance discussions, and the quality of HOKS.

Aspiration

1. Assess the suitability of the ICF framework for describing functional capacity and identifying support needs in vocational special needs education.
2. Pilot the RUORI self-assessment at the beginning of studies and examine its impact on student participation in planning their own studies.
3. Create a clear operational model for implementing RUORI at the start of vocational studies and linking it to individual study planning and follow-up.

Challenges

Some staff feel that RUORI is time-consuming and difficult to incorporate into daily routines. The questionnaire can be lengthy, and some students need help understanding it.

Staff also want clearer and simpler questions. Ongoing training on functional capacity thinking and RUORI methods is essential for effective use.

Insufficient time for follow-up conversations may lead students to feel their results are not fully addressed, reducing the tool's effectiveness.

Resolution

What was created:
A practical model for using the RUORI self-assessment at the beginning of vocational studies. The model includes preparation, student orientation, completion of the self-assessment, a guidance discussion, setting individual study goals, integration into teaching and guidance, and follow-up with possible reassessment.

How it was used and with what results:
RUORI supported a shared understanding of students' support needs between students and staff. It helped identify issues that might not have emerged otherwise and made guidance discussions more focused and concrete.
The use of RUORI strengthened the development of more individualized study plans through a consistent assessment of functional capacity. Students took a more active role in planning their studies and were better able to describe their strengths and everyday support needs, especially with the help of RUORI picture cards.

Link or QR code

https://luovi.fi/en/luovi-global-education/ruori-assessment-tool/

What was learned

A structured self-assessment based on the International Classification of Functioning (ICF) can enhance student voice and make study planning more collaborative.

RUORI encourages strengths-based discussions, which are essential because many students struggle to identify their strengths.

The tool is most effective when staff have dedicated time for guidance conversations and when RUORI is integrated into regular routines rather than treated as an additional task.

Training and the establishment of shared practices are necessary for consistent interpretation of functional capacity information, which can then be used to develop effective support measures.

Next steps

Integrate the RUORI assessment tool into the monitoring of guidance effectiveness and quality management within the institution.

Provide internal training for teachers and counselors to ensure they can use RUORI confidently and consistently.

Enhance follow-up by making progress more visible to both students and staff and implement reassessment when support needs change.

Explore the possibility of expanding to other contexts and developing digital solutions that facilitate smooth use and data-informed development.

RUORI
Describes functional capacity, identifies special needs

Acknowledgements

This study was conducted in Finland using an action research approach, with students playing a central role in the multidisciplinary development team alongside teachers, educational assistants, and a guidance counsellor. The pilot involved two vocational student groups in Business and Media at Luovi Vocational College.

ICF Facilitators

Introducing ICF in Radiography Clinical Practice: The Facilitator's Journey

Ramadimetja Mable Kekana

Department of Radiography
University of Pretoria, South Africa

Course: 2018

Abstract

The ICF framework is used to bring transformation in the way radiographers communicate with the patient when taking clinical history and further help radiographers to uphold their ethical responsibilities of minimising the amount of radiation dose to the patient, while producing quality images.

Backgound

My journey and love for the ICF began in 2018 when I attended the "Train the Trainer" course in my institution. I was eager to learn more and also see how I can have this implemented in the Radiography profession. This seemed far-fetched as I compared Radiography with the rehabilitation professions like Physiotherapy, Occupational Therapy, Speech, Language Pathology and Audiology. The more I learnt about the ICF, being an abbreviation of the International Classification of Functioning, Disability and Health, the more I aspired to see how this framework can be applied in the clinical radiography environment. Literature further taught me that the ICF defines the interactions among health conditions, personal and social factors, daily activities, and social life, which mutually influence one another. This framework allows the patient to be directly involved in assessments and care planning. ICF will help radiographers to focus on the patient's health needs and goals, and not just on the production of images of diagnostic quality.

Inciting incident

ICF brings the critical shift from a purely diagnostic-focused approach, like what is wrong with the body, to a humanistic, holistic patient-centred approach, like how the condition affects the patient's life or ability to comply with the radiographer's instructions during imaging. This transition is driven by the realisation that imaging diagnoses do not fully explain a patient's ability to function, their pain, or their quality of life. The requirement to move beyond diagnosis alone and record *how* a patient functions is crucial for monitoring progress over time. ICF also assist radiographers to recognise how the external factors influence a patient's functioning capacity and ability to participate in exams.

Resolution

Radiography is continuously growing in technological complexity. Healthcare service continues to depend on the services of radiographers to fulfil their mandates. The need for personalised care is also growing. There is a need to ensure that all categories of radiographers have continuous access to training in communication and compassionate care. The ICF framework will serve as a foundational, common language to bridge the gap between imaging results and a patient's overall functioning.

Challenges

The main challenge I faced was to encourage the students to use this in clinical practice. Some students just saw this as an unnecessary addition to their work, which would create delays in the clinical environments, which were already overcrowded with patients. Literature presented a narrow view of the essential points that must be included in the clinical history in the radiography department. According to Hawkin et al, a complete clinical history must have the following three points: a) nature of the symptoms, b) description of injury or cause of clinical concern and c) focal site of pain. This is limited and does not look at the patient holistically, but focuses on the disease.

Aspiration

The study by Hawking et al. demonstrated that there can be an improvement in the way the clinical history is taken in the radiography/radiology clinical environment. Gradual introduction and monitoring are the essential strategies on my journey.

My number one goal is to see the ICF framework being integrated in the undergraduate curriculum for radiographers and used to enhance communication in the radiography clinical environment. I see this as a great tool to help radiographers uphold their ethical responsibilities that relate to the image gently and image wisely campaigns. It all starts with taking a comprehensive clinical history, for the radiographer to perform appropriate and accurate examinations, which will use the minimum radiation dose possible.

My second goal to see the integration of ICF in interprofessional activities, where radiographers are involved as well as during the community outreach projects. The ICF is used in healthcare service delivery and beyond. Its value as a conceptual framework should be utilised in standardising communication among different healthcare professionals and other stakeholders.

My third goal is to train more trainers for the ICF framework in Radiography and healthcare sciences.

Link or QR code

https://drive.google.com/file/d/19TVXUqIiwpxOG8vcMgkkI3fh3ZBkJz2s/view?usp=sharing

What was learned

The use of ICF in clinical practice is evolving. The rehabilitation professionals are able to describe a person's functioning without having to assign a disease label to it. For radiographers, ICF works well as a communication tool. Getting the full clinical history helps the radiographer understand the impact that the disease or clinical condition has on body functions and structures. This is relevant to radiographers as they always ask the patient to turn and move into different positions when taking images. In oncology, communication and a comprehensive clinical history are essential to ensure that the patient understands the whole treatment plan and the importance of follow-up examinations.

Next steps

I have used the ICF with the third-year radiography students for the past six years. I have also introduced the ICF to some of my postgraduate students, like the one who used it as a tool to enhance communication among mammographers and breast cancer patients. It is now time that I introduce this to the qualified and practicing radiographers. I am embarking on this project this year. The next will be presenting ICF at the Radiography and Clinical Technology board of the Health Professions Council of South Africa.

Acknowledgements

Arkoudis NA KE, Moschovaki-Zeiger O, Prountzos S, Efthymiou E, Samonis G, Koutserimpas C. Interdepartmental miscommunication regarding radiology: Addressing chronic challenges and exploring solutions. World Journal of Radiology. 2024; 16(5):109-14. doi:https://doi.org/10.4329/wjr.v16.i5.109

Hawkins CAC, Benkes W Improving the availability of clinical history accompanying radiographic examinations in a large pediatric radiology department. National Library of Medicine. 2014; 202(4) doi:https://doi.org/10.2214/ajr.13.11273

Katlego Chego, Margaret Sethole, Mable Kekana and Kathryn Malherbe. The role of communication between mammographers and patients in the Limpopo province of South Africa. Radiography, 2024; 30(4):1068-72. doi:https://doi.org/10.1016/j.radi.2024.05.001 2024; 30, 1068-1072

van der Veen, S., Evans, N., Huisman, M., Welch Saleeby, P., & Widdershoven, G. (2023). Toward a paradigm shift in healthcare: using the International Classification of Functioning, Disability and Health (ICF) and the capability approach (CA) jointly in theory and practice. *Disability and Rehabilitation*, *45*(14), 2382–2389. https://doi.org/10.1080/09638288.2022.2089737

World Health Organisation. 2001. International Classification of Functioning, Disability and Health. https://iris.who.int/bitstream/handle/10665/42407/9241545429-eng.pdf?sequence=1

Virtual escape room game

FH-Prof. Anita Kidritsch, MSc
USTP – University of Applied Sciences St. Pölten, Austria

Group: 2023

Coaches: Huib Ten Napel, Michelle Janse van Rensburg, Stefanus Snyman, Catherine Sykes,

Abstract An escape room was created as a google site to facilitate learning of ICF-based interprofessional collaboration.

Background

As a lecturer in digital healthcare to interprofessional groups of students and health or social care professionals, crucial content of my teaching is how to classify functioning, e.g. to structure electronic health records or other data.

Digital healthcare students had chosen as a project topic the development of an interprofessional escape room game and therefore raised my interest in digital gamification solutions.

Further, in the Erasmus+ project DIRENE (Digital Rehabilitation in the New Era), I explored mobile learning.

Inciting incident

An event that changed everything and inspired change was the participation in the Erasmus+ projects INPRO (Interprofessionalism in action), through which participation in the ICF facilitator course was organised, as well as in EDUdig, where a simple digital escape room solution in collaborative learning was introduced.

Aspiration

Goal is to improve person-centred, interprofessional collaboration based on ICF in the context of digitalisation.

Challenges

Challenges needed to overcome were the improvement of the webpage usability and targeting the learners.

An ultimate choice was to involve a Master's degree student who evaluated the escape room game with several teachers.

The proposed improvements were implemented in the German version.

Resolution

An escape room google site was created for mobile learning usage.

The 50-minutes game can be played by multiple groups of 3 to 6 pre-experienced learners onsite or online.

It consists of four quizzes, which start with background knowledge and exploring ICF codes in the ICF browser.

A case of a 10-year old girl with cerebral palsy serves as basis for a role-play, in which shared-decision making shall be exercised.

Information shall be sorted per ICF domain and additional information can be invented.

Finally, a broader view on the ICF framework is established, before the learners access a code to exit the room.

A mentor introduces the game, is available to help when asked for and moderates role-play and reflection.

The product is used repeatedly.

Link or QR code

Escape room:
https://sites.google.com/view/knackdencode
Report:
https://www.inproproject.eu/wp-content/uploads/2023/12/5.5.b.18-Development-of-a-digital-escape-room.pdf

What was learned

Lessons learned were that feasibility and usability testing help improving the educational and website design.

Ideally, the patient case used in the game is introduced previously in the course and specific guidance is given at crucial points (e.g. zooming in the browser or opening another window).

Advise for others following in my footsteps is to use short sentences following the rules of easy language.

Next steps

Next steps in putting my work into action is the implementation of an improved English version of the escape room game in the E³UDRES² Micro-Credential "Collaborative Shared Decision-Making for Functioning in Digital Rehabilitation".
https://eudres.eu/microcredential-digital-rehabilitation

This is a free 3 ECTS online course in English consisting of self-paced learning in Moodle and a reflection webinar based on INPRO and DIRENE.

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This work was inspired and improved by my colleagues: Adrijana Krebs, Michelle Janse van Rensburg, Larisa Baciu, Karin Lotter; and my students: Mona Azz, Merry Bakuns, Sophie Kutschi, Sonia Markose, Victoria Pichler, Lisa Rabitsch, Thomas Tippl

ICF Education in the Caribbean

Glenville Liburd[1], Catherine Sykes[2]

1 St Kitts & Nevis
2 University of Sydney, Australia

Course: Spinn Off

Abstract ICF workshops in Guyana and St Kitts & Nevis created a snowball effect in the region. Community gardens and other employment and social opportunities have blossomed in many places.

Backgound

Whilst it was in the 1970s that the World Health Organization initiated Community Based Rehabilitation (CBR) as a strategy to improve access to rehabilitation for people with disabilities in low- and middle-income countries, it was the publication in 2010 of the CBR Guidelines that prompted increased activity towards the goal.
CBR had been initiated in Guyana and supported by government. There was an identified need to build on the success of the programs to extend CBR as a strategy to improve lives of people with disabilities and their families across the many small island states in the Caribbean.
The need for good data to inform the outcomes of CBR and the benefits to individuals, communities and societies was the factor that prompted workshops on the ICF.

Inciting incident

A chance meeting after the 2nd International Conference on Community Based Rehabilitation (CBR) (Malaysia, 2017) between a member of the WHO Family of International Classifications Network and a campaigner for CBR in the Caribbean.
They discussed the needs of the region and how the ICF could facilitate change in the way disability might be perceived leading to changes in the way services for people with disabilities might be delivered.

Aspiration

Goals

- To expand CBR knowledge and expertise across the region.
- Use the ICF framework and classifications to describe the situation of people with disability.
- Advocate for CBR programmes across the region with policy makers and administrators.

Challenges

Whilst there was knowledge of CBR it was fragmented, with established programs in some countries and nothing in others.
The the need to spread messages to governments, health administrations, service providers, Organisations of Disabled People (OPDs), people with disabilities and their personal support networks was one of the greatest challenges.

Resolution

Two workshops on the use of the International Classification of Functioning, Disability and Health (ICF), firstly in Georgetown, Guyana in 2017 and secondly in St Kitts and Nevis in 2018.

An informal network of workshop participants came together in a WhatsApp group. The group expanded exponentially and almost 10 years later has 85 participants.

Discussing ideas, reporting on disability events, drawing attention to research, highlighting success stories, what works and what works less well have been major themes on the WhatsApp group.

Sharing ideas has led to:

- Expansion of disability advocacy groups to include around 300 active participants:
  - Caribbean Disability Network
  - Grassroots Advocacy Peer Support Network
  - Caribbean Horticulture therapy
  - Voice of Disabled – St. Vincent
  - Nevis CBR Advocates
  - Caribbean CBR Network.
- The development of community gardens and other employment opportunities.
- Broadcasts on local radio stations by disability leaders
- Hosting of the 5th Continental CBR Congress in Antigua (2022)
- Hosting of 1st Caribbean Disability Conference in Grenada (2024) and 2nd in Barbados (2025) amongst other events
- Involvement of OPDs in the development of services
- Increased involvement of governments and administrations

What was learned

The words of Margaret Mead resonate with the group. From small beginnings with committed people the perception of disability and the capacity of the community to support them has increased.

> "Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has."
>
> - Margaret Mead

Next steps

The Disability Leaders group will continue to use the WhatsApp group.

Liaison with the WHO PAHO region and other International Non-Governmental Organisations to conduct an International CBR conference in the region.

Continue to advocate for CBR and use of the ICF as means to communicate the situation of people with disabilities in the Caribbean with the aim to improve their lives.

Acknowledgements & Links

Andrew Sharpe, Michele Braithwaite, Bernard Warner and Louise Herbert have been significant contributors to the regional dialogue.
Also, many individuals from across the Caribbean who participate in the WhatsApp groups and share their experiences and resources.
The affiliated OPDs and organisations that have been significant in advancing the regional dialogue and fostering collaboration amongst people with disabilities.

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Contextual Factors in Vocational Rehabilitation: ICF Vs Indian Scenario

Course: May 2024

1. Surohree Mitra, 2.Farheen Patel, 3. Shivani Chutke

1,3- Sancheti IOR College of Physiotherapy
2- Siddheswar College of Physiotherapy

Abstract Adapting the ICF Checklist to identify contextual barriers and promote inclusive vocational rehabilitation in India.

Backgound

This project applies the ICF Checklist Version 2.0 to assess contextual factors influencing vocational rehabilitation in Pune, India.

By systematically analyzing body functions, activity limitations, participation restrictions, and environmental factors, the study adapts global ICF principles to local realities.

The framework identifies barriers, such as infrastructural limitations and prosthesis-related challenges, while highlighting facilitators, such as social support.

The findings promote inclusive, culturally sensitive rehabilitation strategies aimed at enhancing participation and quality of life.

(**IEC number:** IEC-SIOR/ Agenda 082)

Inciting incident

Real-life narratives from participants revealed how contextual barriers — not impairments alone — limited participation:
"I find it difficult to walk more than half a km due to the uneven surface."
"Self-cleaning activities are difficult as removal of the prosthesis takes 15 minutes."
"I can do all activities; I just need more time."
These reflections shifted focus from impairment to environmental barriers, reinforcing the power of ICF.

Aspiration

Goals:
1. Improve accessibility in vocational settings, indirectly enhancing the quality of life (QoL).
2. Reduce participation disparities.
3. Guide policy reforms in due course.

Challenges

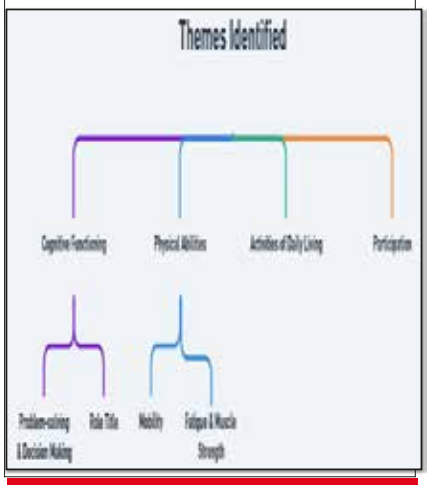
Challenges:
1. Limited infrastructure, resources, & cultural differences in Indian vocational settings.

2. Translating the theoretical framework into a practical tool.

Ultimate Choice:
1. To adapt and contextualize the ICF.

Resolution

The framework when applied in vocational training settings:
1. Identified barriers such as: Inaccessible infrastructure, uneven surfaces affecting mobility, and time-consuming prosthesis management
2. Highlighted facilitators like: Social support, Adaptive strategies tailoring global ICF principles to the Indian context



QR code

For Further Information:

What was learned

1. Always assess environmental and personal factors systematically.
2. Do not assume global models fit local contexts without adaptation.
3. Include patient voice in assessment.
4. Use ICF as a communication tool across disciplines.

Next steps

1. Implement framework at larger scale
2. Train rehabilitation professionals in ICF application.
3. Advocate for infrastructural reforms.
4. Integrate findings into policy-level planning.
5. Develop structured reporting formats for vocational centers

Acknowledgements

A special thanks to our dear ICF facilitators team,
Sancheti Institute for Orthopaedics & Rehabilitation &
SIORCOP Research Advisory Committee for their support, guidance, and passion.

ICF EDUCATION

Mapping Menstrual and Pelvic Health Scenario in India: A Scoping Review of Biopsychosocial Factors

Dr. Suroshree Mitra (PT), Dr. Anu Arora (PT), Dr. Apurv Shimpi (PT)
Maharashtra, India

Courses: 2020 + May 2024

Abstract Taboos and gaps block menstrual and pelvic health for India's girls: An ICF-informed biopsychosocial scoping review mapping the fix!!

Backgound

Adolescence marks critical physical and psychosocial transitions, yet menstrual and pelvic health essential for girls' well-being face barriers in India from cultural taboos, inadequate education, and poor resources.

Objectives:

Map biopsychosocial determinants of menstrual and pelvic health using the **ICF classification framework**.

Identify gaps across body functions, participation, and contextual factors.

Develop standardized, inclusive, evidence-based interventions aligned with functioning and participation outcomes.

Advocate policy reform grounded in ICF-based health equity principles.

Inciting incident

How ICF Informed Practice:

Using the **World Health Organization ICF (International Classification of Functioning, Disability and Health)** framework, we:

Mapped menstrual and pelvic health barriers across body, activity, participation, and contextual domains

Identified misalignment between biological education and environmental readiness

Highlighted participation restrictions (school absenteeism) as key outcome indicators

Classified modifiable environmental facilitators (teacher training, WASH upgrades)

Identified gaps where personal and sociocultural factors perpetuate myths

The ICF framework shifted the focus from "menstrual hygiene management" to **functioning, participation, and inclusion**, strengthening advocacy arguments.

Challenges

Cultural taboos restricted open menstrual health discussions.

Heterogeneous studies with poor quality and bias challenged synthesis.

Limited pelvic health data amid MHM focus created gaps.

Inadequate school WASH facilities hindered practice analysis.

Ultimate choice: Apply PRISMA-ScR and biopsychosocial model for comprehensive mapping.

Resolution

What was created:

PRISMA-ScR–guided scoping review synthesizing 7 studies (97,070+ adolescent girls).

An **ICF-based biopsychosocial mapping framework** was applied to classify findings across:

Body Functions & Structures – menstrual pain, infections, emerging pelvic floor symptoms

Activities & Participation – school absenteeism (17–24%), sports restriction, social withdrawal

Environmental Factors – WASH infrastructure gaps, cultural taboos, lack of pad access

Personal Factors – myths, fear, shame, low health literacy

This structured classification helped identify **systemic gaps across domains**, rather than viewing MHM as purely biological.

Link or QR code

https://assets.cureus.com/uploads/review_article/pdf/373448/20250708-382174-2rk18a.pdf

What was learned

Holistic biopsychosocial approach reveals deeper PHMH barriers than biology alone.

Engage mothers and teachers early as informal sources often spread myths.

Standardized curricula and WASH upgrades yield highest impact on absenteeism.

Advice:Policy advocacy amplifies academic findings into scalable interventions.

Next steps

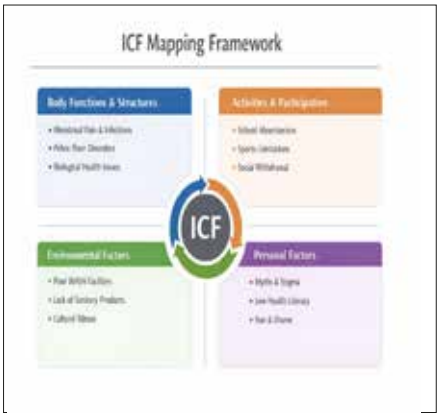
Integrate standardized PHMH curricula in schools with teacher training.

Upgrade WASH facilities and subsidize pads/cups for rural access.

Launch community campaigns targeting myths and family engagement.

Conduct longitudinal pelvic health studies with boys included.

Advocate policy for uniform government MHM implementation.



Acknowledgements

Cureus peer reviewers for constructive feedback.
D.Y. Patil University, Navi Mumbai and Sancheti Institute, Pune for institutional support.
ICF Education coaches and group members

ICF EDUCATION

From Framework to Practice: Applying the ICF to design a Child Development Service in Cambodia

2024/2025

Group identifier
Coaches to insert

Danielle Vellucci
Australian Volunteers Program
Techo Santhepheap National Hospital, Phnom Penh

Abstract Using the ICF to promote functional child development by strengthening responsive relationships, environments, and everyday participation.

Background

Danielle, a Speech-Language Pathologist, has been working in Phnom Penh, Cambodia (Majority World country located in Southeast Asia) since 2019 after moving from Australia, where she worked in the Early Childhood Intervention sector. According to the results of the General Population Census of Cambodia (National Institute of Statistics, 2020), Cambodia's population is notably young, with 38.5% of the population under 15 years old. The Census recorded a disability rate of 4.9% of which 1.2% represent children.

Inciting incident

This experience highlighted significant gaps in child development services within the public health system, including limited trained professionals, the absence of local Speech-Language Pathology and Occupational Therapy professions. Working in a low-resource context where services are still emerging created an opportunity to design a service from the ground up. It has required a shift toward approaches that create meaningful and sustainable outcomes for children with developmental delays and disabilities, and their families.

Aspiration

To establish a sustainable, family-centered Child Development Service within the public health system that builds local capacity, supports caregivers as primary facilitators of development, and uses the ICF to guide functional, meaningful outcomes for children in their everyday lives.

Challenges

The challenges include a predominance of medical, diagnosis-driven models with limited focus on functional participation. Shifting toward a bio-psycho-social approach requires time, shared understanding, and alignment across teams and systems. Systems-level change is slow and complex, shaped by existing structures and relationships. Limited workforce, research, and local data add further complexity.

Resolution

The ICF framework provides an evidence-based, family-centered approach to support meaningful outcomes for children and their family. Translating the ICF into practical, culturally relevant tools, including ICF-aligned assessment and goal setting (translated into Khmer language), a support-level framework linking child functioning and environmental factors, and visual tools.

The model guides coaching-based intervention with families and staff training, focusing on responsive interactions, reducing stress, and building children's skills in their natural environments and everyday activities. It has strengthened professional and caregiver confidence, supported functional participation outcomes and improved consistency for tracking progress.

What was learned

The ICF approach, while valuable, is complex and has required time, training, and shared understanding to apply in practice and ongoing advocating at a systems level. Holding core evidence-based practice principles for early childhood while remaining curious and engaging in ongoing reflection has helped focus to make the framework meaningful in everyday practice. Adapting to the local context is essential (images, language, examples).

This work demonstrates how the ICF can be operationalised into everyday practice in a low-resource setting.

Next steps

Working within a new service has created a valuable opportunity to trial, adapt, and learn in context.

Next steps include continuing to refine and embed the model within the Child Development Service, while strengthening the capacity and confidence of local staff to independently apply the ICF in practice. Expanding the approach across services will require ongoing training, development of locally relevant resources, and adaptation based on feedback from families and teams.

There is also a need to strengthen data collection and evaluation processes to better demonstrate outcomes, inform future service development, and support potential scale-up within the public health system.

Acknowledgements

Thank you to the children, families, and local colleagues who continue to shape and strengthen the Child Development Service. Appreciation is extended to the National Pediatric Hospital, Techo Santepheap National Hospital, and the Australian Volunteers Program for their support.

Link or QR code

For further information. Links to final reports and presentations.

ICF Education in the Republic of Korea

Haejung Lee[1], Catherine Sykes[2]

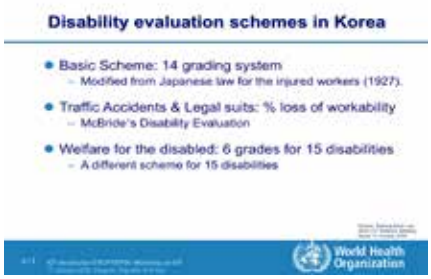
1 Silla University, Busan, Republic of Korea
2 University of Sydney, Australia

Group identifier
Coaches to insert

Abstract ICF education workshops in the Republic of Korea started in 2008 and have been conducted on a regular basis to date. Marking 25 years of the ICF, it reflects on an 18-year journey of implementation. Initially focused on introducing the ICF, the workshops gradually shifted toward practical application in education, clinical practice, disability evaluation, and data systems. The principles of the ICF Education program have been embedded in these workshops.

Backgound

The Korean Collaborating Centre hosted the WHO-FIC Network meeting in Seoul in 2009, followed by an ICF workshop in Daejeon. These activities were supported by World Physiotherapy (then WCPT), the Korean Physical Therapy Association, and a WHO officer, created momentum for ICF implantation in Korea. At the time, Korea had several disability evaluation schemes, and the ICF was recognised as a shared conceptual framework and a common language for functioning and disability.



Inciting incident

WHO suggested that successful ICF implementation requires:

- classification support infrastructure;
- awareness raising, education and training;
- application tools such as the ICF Checklist and WHODAS 2.0;
- national networks and international or regional linkages; and
- conceptual as well as institutional change.

Aspiration

Goals

- Expand knowledge about functioning and disability and change attitudes to disability amongst health professionals.
- Use the ICF framework and classifications to describe the situation of people with disability.
- Use the ICF framework and classifications to rationalise disability data collection in Korea.
- Develop the next generation of Korean ICF educators, researchers and implementation leaders.

Challenges

- Traditional education and health service delivery were largely biomedical in focus.
- There was limited formal education on functioning, disability evaluation, and ICF-based assessment in many health professional programmes.
- Multiple disability evaluation schemes and professional cultures required a common framework for communication.
- Traditional medicine raised additional questions about how functioning, symptoms, impairments, activity limitations, and contextual factors could be described using a neutral language.
- Sustained implementation required translation, teaching materials, policy dialogue, and cross-sector collaboration.

Resolution

- ICF education workshops were conducted in Seoul, Busan, Jeju and other settings.
- The ICF was translated into Korean and used in education and implementation activities.
- WHODAS 2.0 was translated, validated, and introduced as a practical functioning measure.
- ICF modules were embedded in health professional education, broadening graduates' understanding of clients and patients.
- This broadened graduates' understanding of their clients and patients.
- Government and administrative sectors became increasingly involved in discussions on disability data and functioning.
- The work was strengthened through WHO-FIC meetings, workshops, and FDRG activities, and international collaboration.

Link

For further information on ICF education and implementation activities in Korea, please contact the authors. (hjlee@silla.ac.kr)

What was learned

Allied health professionals in Korea have been highly receptive to using the ICF in universities (including ICF in the education programs) and in clinics (to look beyond the medical model to make changes to the lives of people in their care). The ICF helped shift attention beyond diagnosis and impairment toward participation, environmental factors, person-centred care, and multidisciplinary communication. It also created a neutral language for dialogue across rehabilitation, disability services, government, and traditional medicine settings.

Next steps

- Strengthen liaison among government agencies, universities, health professional organisations, and service providers.
- Continue advocacy for ICF-based functioning information in national data collections.
- Expand practical education and implementation across clinical, educational, disability and traditional medicine sectors.
- Support broader uptake in policy, practice, research, and interdisciplinary collaboration.
- Continue updating Korean ICF-related materials in line with WHO-FIC developments.

Acknowledgements

We acknowledge the many individuals and groups across the Republic of Korea who have used the ICF to improve the lives of people with disability and who now communicate more effectively in multi-disciplinary teams. We also acknowledge the international collaborations and friendships that supported this journey.

ICF EDUCATION

Introduction to the ICF as part of final year Interprofessional Education week

Dr Hanlie Pitout, Occupational Therapy Department, Sefako Makgatho Health Sciences University, South Africa

Group: May 2019

Abstract This poster presents the introduction of the ICF within the context of Interprofessional Education as introduced to students of the Sefako Makgatho Health Sciences University in South Africa

Backgound

Final year students at Sefako Makgatho Health Sciences university (SMU) were not exposed to Interprofessional Education (IPE). After SMU lecturers attended an IPE workshop presented by the University of the Free State it was decided to introduce final year students from six professions to an Interprofessional Education (IPE) week. During the IPE week the students participated in a variety of activities including role clarification, roleplay in a case study and an ethics presentation. The week provided an opportunity for students to learn with, from and about each other. Dr Hanlie Pitout attended the IPECP congress in Kenya in 2019 and was introduced to ICF. She recognized the value that ICF can add to the IPE week.

Inciting incident

Students learnt about teamwork and the roles of different professions during the IPE week. During clinical blocks, not all students had the opportunity to implement what they had learned as clinicians still practised in silos. The lecturers not involved in the IPECP week were not aware from the what they could expect of students related to interprofessional collaboration during clinical work.

Aspiration

Developing a theoretical ICF component for IPE week to be presented to all professions was a starting point to teach all students and facilitators the ICF terminology. The theoretical component included introduction to the ICF as well as application of the ICF form to the case study used for role play. When students completed the ICF form it helped them understand the importance of each team member in providing quality care.

Challenges

Final year students were exposed to IPE, however, a way was needed to ensure students could now apply what they have learnt during their clinical blocks. Only two profession's students were exposed to the ICF prior to the IPE week. Another challenge was the profession-specific terminology that students used when communicating with each other, during IPE sessions which restricted communication of the team.

Resolution

The ICF form developed by Dr. Snyman was identified as a suitable tool to introduce to students during IPE week. The ICF form allows students and practitioners of different professions to insert information about a patient on one form. The form clarifies what different professions do and is an effective way to increase efficiency of the team and to save time. Expecting students to complete the form during clinical blocks for at least one patient ensured that students had to work collaboratively with other team members. It also exposed clinicians who were asked by students to the contribute to completion of the form to recognise the value of using the ICF.

The ICF presentation became an important component of the IPE week. Students and facilitators became more familiar with ICF terminology.

Link

Moruwe, T. P., Mavhungu, R. M., Ndhlovu, V. R., Nemakanga, M. N., & Pitout, H. (2023). Knowledge, attitudes, perceptions and experiences of healthcare sciences students using the international classification of functioning, disability and health to foster interprofessional collaborative practice. Undergraduate Research in Health Journal, 1(2), 32-36.

What was learned

Students and facilitators initially were hesitant to use the ICF form due to unfamiliarity. One of the facilitators of medicine programme then reported in the IPE week planning meeting that the ICF form was introduced for all medical students in the community block. The value of completing the form became clear, which led to an increased adaptation not only of the form but also of the importance of ICF in interprofessional collaboration. Students from different professions are now expected to attach the ICF form to patient reports.

Next steps

Occupational therapy students did an undergraduate research project about ICF: the use of the International Classification of Functioning, Disability, and Health by final year students at a Gauteng university to improve Interprofessional Collaborative Practice. The students managed to publish an article in the Undergraduate journal and presented it at the AfrIPEN congress in Malawi in 2023. See link to publication.

Acknowledgements

Students and facilitators who implemented the ICF and who provided valuable feedback on its effectiveness. The author thanks Dr Stefanus Snyman for offering the ICF workshop and for the opportunity to use the form he developed.

ICF Education Online Course for improved clinical practice among Physiotherapists, Speech Therapists, Audiologists and Occupational Therapists in South Africa

Soraya Maart[1], Stefanus Snyman[1], Michelle Janse Van Rensburg[2], Catherine Sykes[3], Huib Ten Napel[4]

1. South African Collaborating Center, 2. University of the Witwatersrand, 3. University of Sydney, 4. Dutch Collaborating Centre

Virtual WHO-FIC

17-21 October 2022

Abstract The South African Collaborating Centre was approached by the Professional organisations of Physiotherapy, Speech Therapy and Audiology and Occupational Therapy to assist them with training in the International Classification of Functioning, Disability and Health (ICF). The course was offered over a period of 26 weeks with a 2 hour zoom session once a week. Participants were required to complete a range of assignments and final project at the end of the course. The course was conducted online using Teachable and Zoom. Teachable is an e-learning platform, where all the resources are located: the programme, study guide, videos, handouts and other reading materials. Zoom was used for presentations, real-time discussions and feedback sessions. The poster highlights the materials developed as group projects to improve clinical practice within the respective professions using the ICF.

Introduction

The ICF was developed by the WHO in 2001, as a framework for understanding health and disability. It focuses on person-centred care and facilitates interprofessional practice.

The framework has been adopted by the South African Department of Health, as a key strategy for achieving universal health coverage. The South African Collaborating Centre was approached by the Professional organisations of Physiotherapy (SASP), Speech Therapy and Audiology (SASLHA) and Occupational Therapy (OTASA) to assist them with training in the International Classification of Functioning, Disability and Health (ICF) as a precursor to the implementation of the National Health Insurance Scheme (NHI).

The objectives of the course were for participants to be:

- familiar with the language, structures and philosophy behind the ICF
- know about and be able to apply the ICF across a range of applications
- able to develop a collection of functioning data informed by the ICF
- able to promote the ICF as a common language between professions.

Methods & Materials

The course was offered over 26 weeks with a 2 hour video conference each week. Participants were required to complete a range of assignments and a final project.

The course was conducted online using Teachable and Zoom. Teachable is an e-learning platform, where all the resources are located: the programme, study guide, videos, handouts and other reading materials. Zoom was used for presentations, real-time discussions and feedback sessions.

The purpose of the final assignment was for the participants to demonstrate the ability to apply ICF in practice, be it a teaching, clinical, policy or research setting.

Examples of the Final Assignments Presented

Participants presented either group or individual assignments on the Zoom platform.

Topic 1 Analysis of the General Household Survey and the 2022 Census in relation to ICF Classification

- Gaps identified in GHS based on ICF classification, e.g. missing ICF categories and qualifiers pertaining to disability, low resource and rural settings.
- GHS shows potential to extrapolate existing questions pertaining to Disability & Rehabilitation services and build on those to create a person-centred database including the functioning and environmental factors

Topic 2: The development of an ICF based tool to capture the biopsychosocial outcome of patients undergoing the conservative spinal care programme.

For further information on any of these projects or the course, contact:

Dr Soraya Maart
soraya.maart@uct.ac.za
Dr Stefanus Snyman
stef@icanfunction.co.za

Topic 3: A summary of functioning and disability in children/youth with cerebral palsy under 18 years of age, for medico-legal practice

- Instrument was developed for an interprofessional summary of present functioning and health status in a client with CP (<18 years old)
- Present functioning addressed in the instrument includes body structures and functions, activities and participation, as well as contextual factors
- Product is based on the Children/Youth with Cerebral Palsy core set (comprehensive version)

Topic 4: Using the ICF framework and language for referral to train primary health care nurses to recognize functioning in mental health care users for referrals to occupational therapy

- The general mental health core set was used to develop a questionnaire for OTs to determine what they perceived were the challenges and needs of the mental health service users.

Topic 5:. Alignment of the ICF terminology and its concepts with those of Occupational Therapy

Discussion and recommendations

Participants developed excellent projects focussing on the use of the ICF in different settings and for various purposes. The instruments will be of value for use in NHI for universal health coverage.

During the course participants developed their knowledge of each of the professions and strengthened interprofessional collaboration.

ICF EDUCATION

ICF-based criteria for the development of clinical guidelines for Universal Health Coverage

Botha, L[3]; de Witt, P[1]; Fourie, M[2]; Benjamin-Damons, N[2]; Abrahams, T[1]; Adams, F[1]; Bezuidenhout, M[2]; Govender, P[1]; Grobler, I[1]; Hussein El Kout, N[2]; Linstrom, D[2]; Manenzhe , A[1]; Ramu, P[3]; Rencken, G[1]; van Heerden, L[2]; Vrey, C[1]; Wiltshire, M[1]; Janse van Rensburg, M[1]; Maart, S[4]; Snyman, S[4]; Sykes, C[5]; Ten Napel, H[6]

[1] Occupational Therapy Association of South Africa; [2] South African Society of Physiotherapy; [3] South African Speech-Language-Hearing Association; WHO-FIC Collaborating Centre in [4] South Africa, [5] Australia, & [6] Netherlands

WHO-FIC
17-21 October 2022

Original Poster Number 167

Abstract The World Health Organization (WHO) has published a process for the development of guidelines. These guidelines don't incorporate ICF-based principles to facilitate person-centred, interprofessional intervention from a biopsychosocial perspective with a focus on functioning and contextual factors. The physiotherapist, occupational therapist and speech-language & hearing therapist professional associations in South Africa collaborated to create 16 ICF-based criteria for developing clinical guidelines for Universal Health Coverage. They invite comment to refine these criteria.

Introduction

South Africa is in a process of introducing Universal Health Coverage (UHC), which provides a full range of essential services at a cost the country can afford. This health reform requires a review of all existing clinical guidelines to ensure they are consistent with UHC policy.

The World Health Organization (WHO) has published a process for the development of guidelines. However, this process fails to address person-centred, interprofessional management from a biopsychosocial perspective with a focus on functioning and contextual factors. It also does not refer to the use of a common language between professions to support collaborative practice, as is found in the International Classification of Functioning, Disability and Health (ICF)

This poster reports on the process of creating ICF-based criteria for the development of clinical guidelines in UHC settings.

Methods

The physiotherapist, occupational therapist and speech-language & hearing therapist professional associations nominated delegates to complete an online course on ICF use, based on the Dutch WHO-FIC Collaborating Centre course, augmented by members of the collaborating centres in South Africa and Australia.

This project was completed as a specially-designed module aimed at exploring the use of the ICF in clinical guideline development and review. The *WHO Handbook for Guideline Development (2nd Edition)* and the *ICF Practical Manual (Version 0.9)* were used to facilitate robust deliberations.

Core criteria were identified, defined, and explained with supporting evidence from peer-reviewed literature. All steps were debated by all participants and finalised when agreement was reached.

Results

The proposed 16 ICF-based criteria for the development of clinical guidelines for UHC

Development of guideline

1. The development of the clinical guideline is consistent with the process described in the WHO Handbook for Guideline Development (2nd or subsequent editions).
2. Adequate and transparent engagement with relevant stakeholders is described in the process of the guideline's development and evaluation.
3. The ICF framework is used to describe health and health-related states, including human functioning and social determinants of health.
4. ICF terminology is used as unified and standard language throughout the guideline.
5. The frequency and method of reviewing the guideline are stated.

Audiences and clinical settings

6. The audiences for whom the guideline is developed, are clearly explained (e.g., health professions, service users, data analysts, administrators, etc.).
7. It is explained how the guideline should be used throughout the continuum of care, in both public and private healthcare settings, including the community and households.
8. The guideline is appropriate, concise, user-friendly, free and easily accessible.
9. Training for end-users on how to apply the clinical guideline is accessible, affordable, and appropriate.

Person-centred approach

10. Service providers are required to apply the person-centred biopsychosocial approach of ICF for organising and documenting information on human functioning as a dynamic interaction between a person's health condition, environmental factors, and personal factors.
11. Interprofessional and trans-professional teamwork is evident.

Recommended Interventions

12. Interventions in the guideline are contextually relevant and evidence-informed.
13. Interventions and outcomes are determined within the context of a biopsychosocial approach to health and are prioritised according to the service user's needs.
14. A human rights-based approach is advocated, embracing ethical principles within equitable and just legal frameworks.

Data Collection

15. Assessment instruments selected for use are appropriately linked to the ICF by using linking rules.
16. Data collection and outcome measures proposed by the guideline include all the components of the ICF framework, namely body functions and structures, activities (activity limitations), participation (participation restriction) and contextual factors (environmental and personal).

Conclusions

The authors have completed the first draft of the proposed 16 ICF-based criteria for the development of clinical guidelines for UHC.

Experts within the WHO-FIC network are invited to comment and help to further refine these criteria.

Download the full document, containing the criteria, questions and literature review by scanning the QR code or go to http://whofic.org.za/16criteria:

Download & Comment

Please provide your feedback to:
Dr Stefanus Snyman
stef@icanfunction.co.za

ICF Facilitators

ICF EDUCATION

Developing ICF-Based Forensic Reporting Policies: Advancing Documentation Standards, Forensic Practice, Training, and Judicial Clarity in Arab Countries

Mamdouh Kamal Zaki
Consultant of Forensic Medicine, Saudi Arabia,

Course: Sept 2025

Coaches

Huib Ten Napel, Stefanus Snyman, Catherine Sykes

Abstract

This project develops ICF-based forensic reporting policies to modernize documentation standards across Arab countries. Current systems rely on impairment-only assessments, limiting legal clarity. The proposed policy integrates ICF principles—unified terminology, structured functioning descriptors, and contextual factors—to enhance judicial interpretation, improve audit quality, and support national standardization. The project includes background research, stakeholder engagement, policy drafting, pilot testing, and a roadmap for training and system integration.

Background

The forensic reporting systems across Arab countries—particularly within Ministries of Health and Justice—remain fragmented and heavily biomedical. Reports focus on impairments of body structures/functions while omitting functioning, activities, participation, and environmental factors. This results in medically accurate but **legally ambiguous** documentation, weakening judicial clarity.

Your project proposes **ICF-based forensic reporting policies** to modernize documentation, enhance judicial interpretation, and align national practice with international standards.

Inciting incident

Fragmented forensic reporting practices across Arab countries—especially Egypt and Gulf states—produce incomplete, impairment only reports. Courts struggle to interpret functional consequences, leading to inconsistent rulings and reduced judicial confidence.

Challenges

1. Fragmented, inconsistent reporting practices
2. Overreliance on impairment-based tables
3. Absence of functioning, participation, and environmental factors
4. Limited training in ICF coding and qualifiers
5. Judicial difficulty interpreting biomedical-only reports
6. Lack of standardized national policy

Resolution

A detailed policy framework was developed, including:

1. ICF aligned reporting templates
2. Ethical and rights-based guidelines (ICF Ethics, CRPD)
3. Disability statistics integration
4. Stakeholder consultation plan
5. Implementation roadmap (7 phases)
6. Training goals and observable competencies

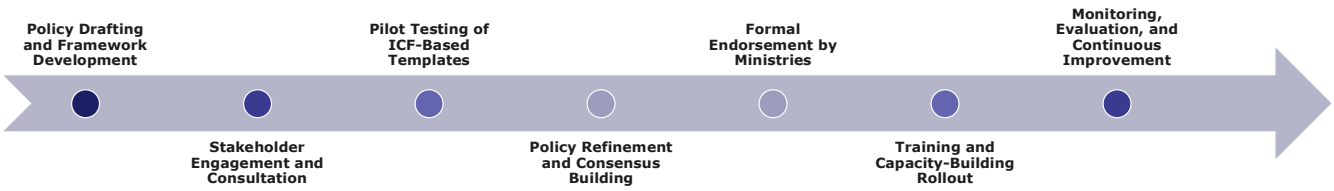
What was learned

- ✓ ICF provides a structured, internationally recognized framework for describing functioning.
- ✓ Forensic reporting must integrate **activities, participation, and environmental factors** to be legally meaningful.
- ✓ Impairment ≠ disability; functioning must be measured using tools like WHODAS 2.0.
- ✓ Policies must precede training to ensure national consistency.
- ✓ Stakeholder engagement (MOH, MOJ, judiciary) is essential for adoption.

Next steps

1. Secure MOH & MOJ endorsement
2. Pilot ICF based templates in selected forensic centers
3. Develop national training modules
4. Integrate ICF into electronic forensic systems
5. Establish monitoring indicators and dashboards
6. Conduct accessibility audits and barrier removal
7. Publish annual "Ethical & Rights Based Forensic Practice Report"

Phases of the Implementation Roadmap



Aspiration

To establish a nationally endorsed, ICF aligned forensic reporting policy that:

1. Standardizes documentation
2. Enhances judicial confidence
3. Improves compensation assessments
4. Strengthens ethical, rights-based practice
5. Forms the foundation for future training and accreditation

Link

- ✓ ICF unifies health, justice, and disability sectors under one standardized documentation framework.
- ✓ ICF provides the missing policy bridge between medical reporting and judicial interpretation.
- ✓ Email: mklz@hotmail.com
  Mobile: 00966501411243

Acknowledgements

I would like to express my sincere appreciation to **my coaches — Huib Ten Napel, Stefanus Snyman, and Catherine Sykes** — for their exceptional guidance, expertise, and continuous encouragement throughout this project.
My sincere thanks to **my colleagues**, whose encouragement and kindness supported me through my hard times.

ICF TRAINING MATERIALS TO SUPPORT ITS APPLICATION IN CLINICAL PRACTICE

Course: June 2023

Paltamaa Jaana and Myllyharju-Puikkonen Anu
Jamk University of Applied Sciences, Jyväskylä, Finland

Abstract There is a strong expectation that ICF training should move beyond theory and offer practical, ready-to-use materials and tools.

Background

ICF training is offered to many social & healthcare students and professionals. Many teachers report that, although they understand the ICF conceptually, they lack clear guidance on how to implement it in real practice. There is a strong expectation that ICF training should move beyond theory and offer practical, ready-to-use tools.

This material is intended for social and healthcare professionals and students who already understand the basics of ICF and want to learn how to apply it confidently in their practical work.

The ICF e-learning Tool developed by the WHO-FIC Education and Implementation Committee (EIC) and the Functioning Disability Reference Group (FDRG) is recommended for study before the advanced course.

Inciting incident

The development draws on:
- The authors' experiences from previous ICF training courses they have held
- Needs identified during the INPRO Interprofessionalism in action project (Erasmus+ 2021-2023) https://www.inproproject.eu/
- Insights and materials from the ICF Facilitator Course
- The Finnish two-day ICF basic course (16 hours) based on material from the ICF Research Branch

Aspiration

The material was developed to respond to the need of concrete ICF training and to support the implementation of ICF in clinical practice.

Goals
- to present the use of the ICF as a person-centred and interprofessional approach
- to describe tools and approaches for applying ICF into the practices

Challenges

Numerous ICF-based materials, tools, and approaches are available, and when compiling the material, choices had to be made that focused on material suitable for Finnish education and clinical practice.

Implementation of the ICF varies depending on the organization, so the material should be adapted for different target groups.

Resolution

The purpose is to support the implementation of the ICF in a way that emphasises:
- Person-centredness
- Interprofessional cooperation
- Concrete, practice-oriented tools
- Consistency across education and clinical environments

It is based on MAGPIED (Meet, Assess, Goal set, Plan, Implement, Evaluate, Document) rehabilitation process focusing on Assess and Goal setting phases.

Modular structure of the material is suitable for:
- Professional training (1–2 days)
- Integration into student courses
- Self study
- Blended learning (self-study + live sessions)

The material is in pdf format and is supported by a PowerPoint slide show available in Finnish and English.

Link or QR code

The English-language materials have been published as part of the INPRO project's ICF implementation materials:
- ICF in person centred rehabilitation – Material to support the interprofessional implementation (ICF advanced)
- Supplementary pptx material to the pdf "ICF in person centred rehabilitation"

https://www.inproproject.eu/icf-education/

What was learned

By integrating theoretical foundations with practical tools, the course could strengthen the consistent and meaningful use of the ICF in clinical and educational settings, thereby enhancing shared understanding, collaborative practice, and the quality of rehabilitation.

Even though the material follows the MAGPIED rehabilitation model, it can be used by any professionals who uses the ICF.

MAGPIED rehabilitation process: Meet, Assess, Goal set, Plan, Implement, Evaluate and Document.

Next steps

To support the practical implementation of the ICF, it is essential to organize training that highlights its potential from a lifelong learning perspective.

One concrete example is the E³UDRES² microcredentials, which offer a practical way to disseminate and implement the material. The basics of the ICF are already included in the 3 ECTS course "*Collaborative Shared Decision-Making for Functioning in Digital Rehabilitation*". https://arena.eudres.eu/learning/

Acknowledgements

The ICF Research Branch (Melissa Selb and Monika Finger)

The coaches of the ICF Facilitators programme (Catherine Sykes, Stefanus Snyman, Huib Ten Napel and Michelle Janse van Rensburg)

ICF EDUCATION

The ICF Handbook: A Comprehensive Guide to Functioning and Rehabilitation in Physiotherapy

[1]Dr. Sanjivani Kamble , [2]Dr Suvarna Ganvir

[1]Associate Professor, Dr D Y Patil College of Physiotherapy, Pune, [2]Professor, DVVPF's College of Physiotherapy, Ahilyanagar, India.

Course: May 2020

Abstract The International Classification of Functioning, Disability and Health (ICF) developed by the World Health Organization (WHO) is an important framework in physiotherapy education and rehabilitation practice. In Maharashtra, ICF carries significant weight in undergraduate and postgraduate physiotherapy curricula, including theory examinations, coding, and case-based applications. However, despite its academic importance, no dedicated physiotherapy-specific textbook, handbook, or reference guide on ICF was available. This identified academic and clinical gap became the primary need for developing *The ICF Handbook: A Comprehensive Guide to Functioning and Rehabilitation in Physiotherapy*.

Background

- The International Classification of Functioning, Disability and Health (ICF) by WHO is an important framework in physiotherapy education and rehabilitation practice.
- In Maharashtra physiotherapy curricula, ICF carries significant examination weightage including coding, functional diagnosis, and case-based applications.
- Despite its academic importance, no dedicated physiotherapy-specific textbook, handbook, or reference guide on ICF was available.
- Students and faculty faced difficulties in understanding practical application of ICF in assessment, documentation, goal setting, and rehabilitation planning.
- This academic gap led to the development of *The ICF Handbook: A Comprehensive Guide to Functioning and Rehabilitation in Physiotherapy*.

Inciting incident

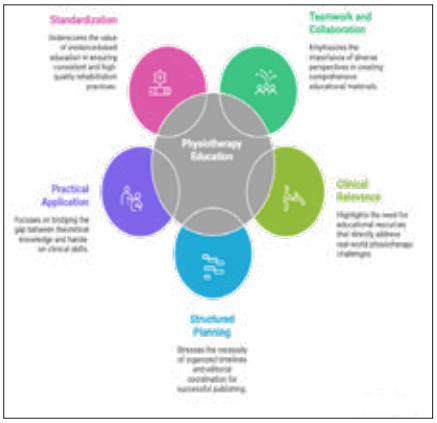
- ICF became an important part of the physiotherapy syllabus during our student years.
- Despite its significant academic weightage, no dedicated physiotherapy handbook or reference book was available.
- Teaching depended mainly on WHO websites and scattered online resources.
- Students and faculty faced difficulty in understanding practical ICF application.
- During a discussion with my mentor, the idea of developing an ICF handbook emerged.
- This academic need initiated our book-writing journey.

Aspiration

To develop a simplified and practical ICF handbook for physiotherapy students and faculty. To bridge the gap between theory and clinical application of ICF. To promote standardized and patient-centered rehabilitation practice.

Challenges

What was learned



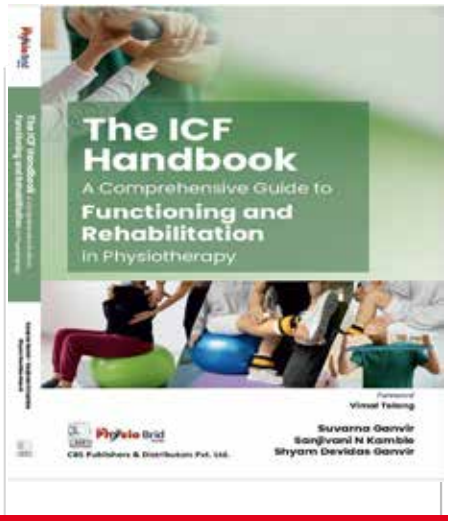
Resolution

Official Book Publication Link

https://www.cbspd.com/books?search=icf

Next steps

- Promote ICF-based education and clinical practice.
- Conduct workshops and training programs on ICF application.
- Develop future editions with advanced case studies and clinical examples.
- Encourage research and interdisciplinary collaboration in rehabilitation practice.



Acknowledgements

- Special thanks to Dr Divya Gupta and the publication team for their publication support.
- We sincerely thank My mentors Dr Suvarna Ganvir and Dr Shyam Ganvir for their guidance and encouragement.
- We also thank all co-authors, Catherine Sykes, and Alaknanada Bannerjee for their mentorship and support throughout this journey.

ICF EDUCATION

ICF-Based Community Rehabilitation in Hong Kong

Nancy Shaw[1], Karen K. W. Lung[2], Dino C. K. Hung[2], Lee Yin Goh[1], Yu Man Ho[1] **Group: May 2026**
[1] NTW Integrated Community Rehabilitation Centre, SAHK
[2] Head Office, SAHK, Hong Kong SAR, China

Abstract Community rehabilitation in Hong Kong has entered a new era with the adoption of the ICF framework. The ICF provides a common language for interprofessional collaboration and supports the integration of centre-based and home-based services to address both biomedical and social determinants of health. Key challenges and resolution were discussed, Hong Kong's ICF initiatives are poised to deliver a holistic, scalable, and client-centred model of community rehabilitation.

Background

Hong Kong has taken a significant step forward in community rehabilitation through the adoption of the World Health Organization's International Classification of Functioning, Disability and Health (ICF) framework. The SAHK successfully piloted the Integrated Community Rehabilitation Centre (ICRC) in 2023, which was regularized in 2025. By 2027, fourteen ICF-based ICRCs will commence services across the territory, marking a significant milestone in the development of community rehabilitation services in Hong Kong.

Inciting incident

ICF-based clinical practice transforms professionals from healthcare and social welfare sectors into a transdisciplinary team delivering community rehabilitation characterized by:

1. **Common framework**: The ICF provides a universal language for describing health, functioning and disability, ensuring consistency across disciplines.
2. **Interprofessional collaboration**: The framework bridges healthcare and welfare professionals, strengthening teamwork and coordinated care.
3. **Holistic rehabilitation model**: Extend beyond biomedical factors to include social determinants of health.
4. **Integrated care**: ICRCs combine centre-based rehabilitation with home-based practice, to facilitate the transfer of functional skills learned in the therapy centre into real-life situations.

Aspiration

Five ICRC and Head Office staff members from SAHK participated in the ICF Facilitator Course to strengthen competencies in applying the ICF framework in clinical practice, with the aim to:

- **Deepen ICF expertise**: Ensure the local ICF-based rehabilitation practices is aligned with global trend.
- **Enhance clinical practice:** Translate ICF principles into practical interventions bridging center-based and home-based rehabilitation.
- **Build leadership capacity:** Empower SAHK representatives to act as facilitators and trainers, cascading ICF knowledge and practice across all ICRCs operated by SAHK.

Challenges

As demand for rehabilitation services grows, staff are increasingly challenged to maintain service quality and workforce sustainability. Key challenges include:

- **High client-to-staff ratio:** Demand for services outpaces available manpower, risking burnout.
- **ICF coding complexity:** Manual coding is time-consuming, difficult to master, and prone to inconsistency.
- **Scaling implementation across territories**: Sharing experiences and outcomes across 14 centres operated by different NGOs presents logistical challenges. Ensuring service consistency requires robust coordination and a strong local on-the-job training infrastructure.
- **Limited client self-management awareness:** Clients and carers often adopt passive roles in rehabilitation planning and self-management, reflecting low awareness of self-control and active involvement.

Resolution

Several strategies were proposed to support sustainable ICF-based rehabilitation implementation:

- **Digital ICF system:** Develop digital platform to automate ICF code mapping, reduce administrative burden, and enhance service efficiency.
- **Task-shifting:** Delegate routine tasks to trained support staff to ensure continuity of practice in real life settings.
- **Staff training:** Provide continuous professional development in ICF application and digital rehabilitation systems to ensure staff efficiency.
- **Advanced technology:** Advocate for greater use of portable telerehabilitation technologies to bridge supervised center-based training and self-administered home programmes.
- **Client and carer empowerment**: Promote active participation in rehabilitation planning and daily care.

Link

A government-funded international conference titled "Globalization of WHO's ICF in Clinical Practice: Worldwide Experience Sharing Conference", was jointly organised by SAHK and the Hong Kong Physiotherapy Association in 2023. The conference brought together internationally recognised ICF experts, including Prof. Gerold Stucki, Dr Matilde Leonardi, Prof. Reuben Escorpizo, Prof. Tsan-hon Liou, who delivered lectures, workshops, and on-site consultations for ICRC services.

What was learned

The regularisation and expansion of ICRCs represent a transformative shift in community rehabilitation in Hong Kong. Embedding the ICF framework enhances rehabilitation outcomes through:

- active client engagement in goal setting,
- greater support and empowerment for carers,
- improved participation in meaningful daily activities, and
- more holistic clinical reasoning.

Importantly, the ICF framework also serves as a unifying philosophy across disciplines, promoting interprofessional collaboration and coordinated client-centred care.

Next steps

Addressing challenges related to workforce capacity and digital infrastructure will be essential to the success of this ambitious initiative. By integrating digital rehabilitation systems with innovative staffing models, ICRCs may better manage increasing service demands while maintaining high-quality care. These developments will support the expansion of equitable, sustainable, and client-centred community rehabilitation services across Hong Kong by 2027. Future priorities include establishing inter-centre databases for case sharing, outcome tracking, and dissemination of best practices.

Carrying forward the legacy, ushering in the future

Acknowledgements

The authors would like to express sincere gratitude to the Dedicated Fund of the Social Welfare Department for sponsoring our participation in the ICF Facilitator Course. We also thank the course's coaches for sharing international perspectives and practices, which enabled meaningful comparison between Hong Kong's rehabilitation model and global ICF implementation approaches.

ICF EDUCATION

ICF Facilitators

Towards Universal Health Care in South Africa
Developing WHO-FIC Coding for Occupational Therapy

Dr. J. McAdam, Ms A. Ramlaul, Ms T. Abrahams, Dr. F. Adams, Prof. P. de Witt, Prof. P. Govender, Ms. I. Grobler, Dr. P. Mavhandu, Ms R. Pillay, Ms G. Rencken (Occupational Therapy Association of South Africa), Dr. W. Sive (University of Witwatersrand-South Africa)

WHO-FIC
13-18 October 2025
Group: 2022 & March 2025

Abstract

With the transformation of the health system towards universal healthcare in South Africa, the government has endorsed the introduction of WHO-FIC as the national coding system. The Occupational Therapy Association of South Africa (OTASA) facilitated WHO ICF training of a national task team comprising experienced occupational therapy managers, clinicians and academics. The mandate was to determine how each of the WHO-FIC components (ICD-11, ICF, and ICHI) could describe and code occupational therapy interventions in the South African context. The WHO-FIC components have been identified as valuable tools in effectively outlining patient intervention goals related to assessment, treatment, prevention, health promotion and quality of life and follow-up at the individual patient level within Occupational Therapy care processes. This poster describes the process and principles used, highlighting areas where there was a good fit and where challenges arose.

Introduction

Occupational therapy is a person-centred health profession concerned with promoting health and wellbeing through occupation. The primary goal is to enable people to engage in the occupations they want to, need to, or are expected to, despite the challenges of their health condition or disability by modifying their activity or participation or the environment to better support their engagement (1). The South African government has endorsed the introduction of the WHO-FIC as the national coding system. A national task team (OTASA) completed the WHO-approved ICF training and were tasked with the objectives of determining:

1. How the components of the WHO-FIC relate to and could be used to describe the components of the occupational therapy care processes:
   - Assessment, intervention, goals and outcomes.
   - Prevention, health promotion, acute hospital-based care as well as out-of-hospital care on the Primary Care platform.
2. The fit between the occupational therapy lexicon and that of the WHO-FIC.

Method

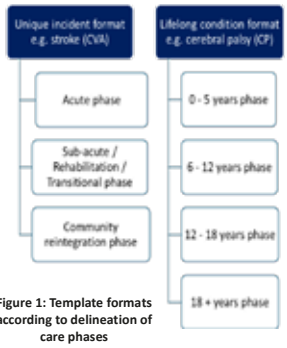


Figure 1: Template formats according to delineation of care phases

Over the previous two years, OTASA set up expert panels of Occupational therapists tasked with developing diagnosis-specific clinical protocols, describing occupational therapy service delivery using a UHC approach.

Two of these were used by the OTASA National task team to explore the development of WHO-FIC coding for occupational therapy to identify aspects of good fit and gaps.

Of the two health conditions, one included where the disability is evident at birth or in early childhood (Cerebral Palsy [CP]), which considered different levels of occupational therapy care in age bands and the other an acquired disability (cerebro-vascular accident [CVA]), which only considered levels of care.

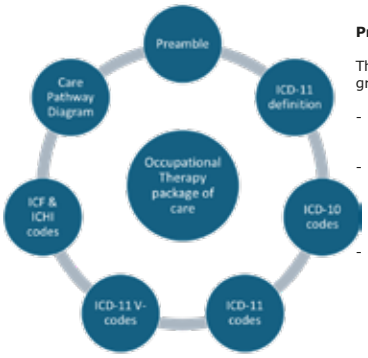


Figure 2: Integration of WHO-FIC coding systems: Occupational Therapy service packages in South Africa

Process

The same process was used by both groups

- The ICD11 codes, including the V codes, were used to describe the condition.
- The ICF codes were described for each stage of the intervention over the life course.
  The ICHI codes were described as linked to each ICF code.
- A referral pathway based on the occupational therapy process was described pictorially, linked to the national referral pathway.

Principles

- The occupational therapy process was to be made overt.
- The process must consider hospital-based care and transition to the home and community, and the establishment/re-establishment of all aspects of participation: self-care, domestic life, school, work, leisure and community life as the recognised domains of occupational therapy(2).
- Occupational therapy is not a "one-size-fits-all" process, as the way in which body structures and functions impact functionality and the way deficits can be overcome or adaptations made is the unique skill and competency of the occupational therapist, as a complex range of personal and environmental factors need consideration in clinical reasoning and decision making

Results

The task team critically reviewed the two selected health conditions with an occupational therapy lens and developed the first draft of the two packages of care, starting with a definition, the ICD-10 and ICD-11 codes and then mapping the ICF codes from the body structures and function and activities that were likely to influence the participation of the person with each health condition considering the personal factors and environment as per our Scope of profession (see Table 1). The ICHI codes for the Occupational therapy interventions were developed from the ICF mapping according to phases of intervention for CVA and Age bands for CP (See Table 2).

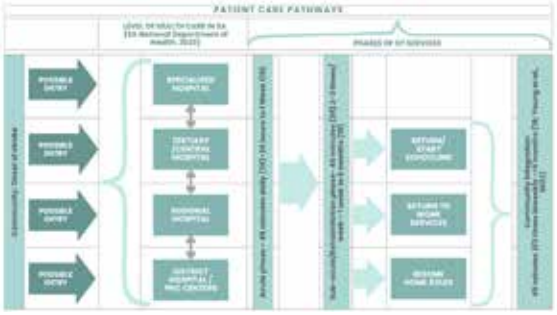


Figure 3: CVA Care Pathway

Table 1: Stroke

Definition		
A stroke is a condition that falls within a group of brain dysfunctions related to disease of the blood vessels supplying the brain. This includes Intracerebral haemorrhage; Subarachnoid haemorrhage; Cerebral ischaemic stroke; and Stroke not known if ischaemic or haemorrhagic (ICD-11).		
Condition		
ICD10: **Cerebrovascular diseases (I60-I69)**, excl. G45.-, S06.-, F01.- ICD11: **Cerebrovascular diseases (8B00-8B2Z)**, excl. NA07		
Body Functions & Structures	**Activities**	**Participation**
b110 Consciousness functions b114 Orientation functions b117 Intellectual functions b126 Temperament and personality functions b130 Energy and drive functions b134 Sleep functions b140 Attention functions b144 Memory functions b152 Emotional functions b156 Perceptual functions b164 Higher-level cognitive functions b167 Mental functions of language b176 Mental function of sequencing complex movements b180 Experience of self and time functions b210 Seeing functions b215 Functions of structures adjoining the eye	**D1: Learning and applying knowledge** • Purposeful sensory experiences (d110-d129) ○ d110 Watching • Basic learning (d130-d159) ○ d130 Copying ○ d131 Learning through actions with objects ○ d135 Rehearsing ○ d137 Acquiring concepts ○ d138 Acquiring information ○ d145 Learning to write ○ d155 Acquiring skills ○ d159 Basic learning, other specified and unspecified • Applying knowledge (d160-d179) ○ d160 Focusing attention ○ d163 Thinking ○ d166 Reading ○ d170 Writing ○ d172 Calculating ○ d175 Solving problems ○ d177 Making decisions	**D6: Domestic Life** • Acquisition of necessities (d610-d629) ○ d620 Acquisition of goods and services • Household tasks (d630-d649) ○ d630 Preparing meals ○ d640 Doing housework ○ d649 Household tasks, other specified and unspecified • Caring for household objects and assisting others (d650-d669) ○ d650 Caring for household objects ○ d660 Assisting others ○ d669 Caring for household objects and assisting others, other specified and unspecified ○ d698 Domestic life, other specified

Table 2: Cerebral Palsy

AGE RANGE: 6-12 years			
Within this age-range the overall goal is to optimise physical capacity and prevent secondary complications, thereby enhancing the child's ability to participate in daily activities and age-appropriate roles and to support the child's ability to engage meaningfully and independently in everyday occupations such as self-care, learning, and play within their natural environments, thereby enhancing quality of life, inclusion, and developmental potential. OT works holistically to ensure that gains in motor or cognitive function translate into meaningful engagement in occupations, not isolated skills.			
Functional Outcome/Goal	**ICF Codes (Broad)**	**ICHI Codes (Assessment)**	**ICHI Codes (Intervention)**
Focusing on body structure and function (e.g. muscle tone, joint range, strength, and postural alignment) to help **prevent musculoskeletal complications** such as hip dislocation, scoliosis, and fixed deformities. - Enhancing physical capacity to support **motor skill development**, allowing for better participation in school, play, and social environments.	**B7. Neuromusculoskeletal and movement-related functions** b710 Mobility of joint b715 Stability of joint b730 Muscle power b735 Muscle tone b740 Muscle endurance b755 Involuntary movement reaction b760 Control of voluntary movement b770 Gait pattern	MU2.AA.ZZ Assessment of muscle functions, not elsewhere classified MV2.AA.ZZ Assessment of movement functions, not elsewhere classified OR MUC.AA.ZZ Assessment of muscle tone MUB.AA.ZZ Assessment of muscle power MUB.AE.ZZ Manual examination of muscle power MTB.AA.ZZ Assessment of joint mobility MTB.AB.ZZ Measurement of joint mobility MTB.AM.ZZ Observation of joint mobility	MV2.PG.ZZ Assisting and leading exercise for movement functions, not elsewhere classified OR MUC.LD.ZZ Positioning for muscle tone MUC.PG.ZZ Assisting and leading exercise for muscle tone functions MUC.PM.ZZ Education about muscle tone functions MTB.LD.ZZ Positioning for joint mobility MTB.PM.ZZ Education about joint mobility MTB.PN.ZZ Advising about joint mobility MUD.PG.ZZ Assisting and leading exercise for muscle endurance functions XG7MX8 Sensory skills and techniques XG0HN6 Cognitive skills and techniques XG6DJ0 Strength techniques XG9CR0 Endurance techniques XG7QD2 Movement techniques XG9GV5 Flexibility techniques XG0X44 Multi-faceted exercise techniques XG90D5 Ergonomics

Conclusions

This is a work in progress.

- Terms in the ICF and ICHI are not an exact fit with the occupational therapy lexicon.
- Some professional-specific interventions are not included in the ICHI, which is a gap in the coding of some professional interventions.
- Understanding of a person's participation requires exploration of factors unrelated to the health condition and outside of the two personal factors: age and gender.

References

1.World Federation of Occupational Therapy (2012) Definition of Occupational Therapy
2,Department of Health (2023) Scope of the profession of occupational therapy (R3101) Government Gazette 3 March 2023.

ICF EDUCATION

ICF Facilitators

Journey of ICF Training Through Structured Workshops in India

Groups: Several

Dharma Foundation of India (DFI)

BACKGROUND

Workshops provide interactive, hands-on learning that improves understanding, confidence, and professional skills. The ICF framework requires practical exposure for effective implementation in healthcare, rehabilitation, and education.

ABSTRACT

Structured workshops have helped bridge the gap between theory and practice in implementing the WHO's International Classification of Functioning, Disability and Health (ICF) in India. Since 2015, DFI has trained professionals, academicians, and students through offline and online workshops, expanding ICF awareness and practical application across the country.

ASPIRATION

To create a nationwide network of trained professionals and educators capable of applying ICF in clinical practice, education, research, and community rehabilitation.

INCITING INCIDENT

Professionals in rehabilitation and disability services identified a major gap between theoretical understanding of ICF and its practical use. Limited training opportunities created the need for structured workshops in India.

CHALLENGES

- Shortage of trained professionals
- Disability stigma
- Limited rural resources
- Complex documentation process
- Poor integration into healthcare and education systems
- Limited interdisciplinary training

RESOLUTION – JOURNEY TIMELINE

2011

DFI initiated all three days Offline ICF Education Workshops in 2011 for all healthcare stream providers in Institutions, Colleges and Hospitals.

2015

A one-day ICF International workshop was conducted in New Delhi in 2015 by Faculty from ICF Education Dr Catherine Sykes for 19 students and faculty from Karnataka and Maharashtra.

2016–2019

The program later expanded to other regions across India.

March 2023

WHO India invited DFI to train special educators on the use of ICF for differently abled children.

At this point recognised of these ICF workshops were made by *Central Bureau of Health Intelligence (CBHI)* + Directorate General of Health Services (DGHS) Ministry of Health Government of India

2026 Onwards

Since 2026, workshops started online, enabling training of over 150 professionals and students across India through monthly sessions.

WHAT WAS LEARNED

- Young professionals are eager to use ICF in practice and research.
- Case-based learning improves understanding.
- Practical examples simplify complex concepts.
- Faculty strength grew from 2 trainers in 2015 to 15 resource persons.
- Workshops created collaborative learning networks.

NEXT STEPS

1. Establish zone-wise DFI chapters.
2. Add research modules to workshops.
3. Organize annual ICF summits for networking and collaboration.

ICF WORKSHOP REACH ACROSS INDIA

- Pune
- Delhi
- Bangalore
- Belgaum
- Mohali
- Aurangabad
- Ahmadnagar
- Dharwar
- Trivandrum
- Chennai

Trained 1000+ Professionals & Students Across India Since 2011

LINK

https://www.dharmafoundationofindia.com/

ACKNOWLEDGEMENTS

DFI acknowledges (all faculty ICF Education India)

1. Dr. Alakananda Banerjee
2. Dr. Robins Kumar
3. Dr. Prashant Naik
4. Dr. Suvarna Ganvir
5. Dr. Apurv Shimpi
6. Dr. Anu Arora
7. Dr. Anjan Bhattacharya
8. Dr. Gurpreet Singh
9. Dr. Snehal Dharmayat
10. Dr. Suroshree Mitra
11. Dr. Sanjivani dhote
12. Dr. Gayathri Poojari

ICF EDUCATION

Measurement of ICF Awareness Among Saudi MOH Headquarter Relevant Employees

Manal Mobarak, Saudi Arabia

Group: May 2024

Abstract

This project aimed to improve awareness of the International Classification of Functioning, Disability and Health (ICF) among Saudi Ministry of Health headquarter employees through development of educational materials, workshops, and structured assessments. The project also proposed minimum ICF data requirements for health information systems to support interoperability, policy development, and person-centred care.

Backgound

The project focused on increasing awareness and understanding of the International Classification of Functioning, Disability and Health (ICF) among relevant Ministry of Health employees in Saudi Arabia.

The initiative aimed to establish foundational ICF concepts and support integration of the ICF framework into healthcare systems and interdisciplinary practice.

Inciting incident

The need to establish foundational ICF concepts and promote integration of ICF into health information systems and interdisciplinary collaborative practice motivated the project.

Aspiration

To establish a sustainable ICF culture within Saudi healthcare systems and support integration of functioning information into national health information platforms and disability-related services.

Challenges

- Limited awareness of ICF concepts
- Need for interdisciplinary collaboration
- Integration of ICF into existing health information systems
- Need for standardized functioning and disability documentation

Resolution

The project successfully:

- Developed an Arabic educational resource on medical coding applications including ICF
- Designed and implemented ICF awareness questionnaires
- Organized ICF-based health information requirements
- Promoted understanding of the biopsychosocial model within healthcare settings

Link

What was learned

- ICF supports person-centred care
- ICF enhances interdisciplinary communication
- Functioning information improves health policy development
- Integration of ICF supports ethical and inclusive healthcare systems
- ICF promotes interoperability across health information platforms

Next steps

- Expand ICF education nationally
- Integrate ICF into electronic health systems
- Continue evaluating awareness outcomes
- Promote ICF-based interdisciplinary practice
- Strengthen disability and functioning data collection systems

Acknowledgements

Special thanks to:

- Dr. Hanan Demyati
- ICF Education Coaches
- All contributors supporting the advancement of ICF education and integration in Saudi Arabia

APPLICATION OF INTERNATIONAL CLASSIFICATION OF FUNCTIONING, DISABILITY AND HEALTH CATEGORIES IN FOOT PATHOLOGY

Dubovikhin Alexandr,
Karaganda Medical University, Kazakhstan

Course: September 2025

Abstract

The aim of the work is to develop basic ICF sets for individuals with foot pathology to improve the quality of rehabilitation and patient assessment.

Backgound

Musculoskeletal system disorders are highly prevalent among children and adolescents, with foot flattening and flatfoot accounting for up to 23.4% of cases. Our data, along with literature reports, indicate that first-degree longitudinal flattening is present in 40.8% of individuals with flatfoot, while second- and third-degree flattening occur in 9.7% of cases, respectively. Given the high prevalence of foot pathologies and the need for rehabilitation in this patient group, there is a clear need to develop assessment scales for foot impairments based on ICF categories.

Inciting incident

Having worked for a long time as an orthopedic rehabilitologist, I began to notice that in order to achieve the best outcome in treatment, I need to take into account many factors: the time I stay on feet, the type of shoes, workplace and leisure activities. Sometimes even what colleagues/relatives/classmates say. However, I didn't have a single tool for the optimal algorithm. It was only after I got to know the ICF that I realized that I had found the perfect tool for work.

Aspiration

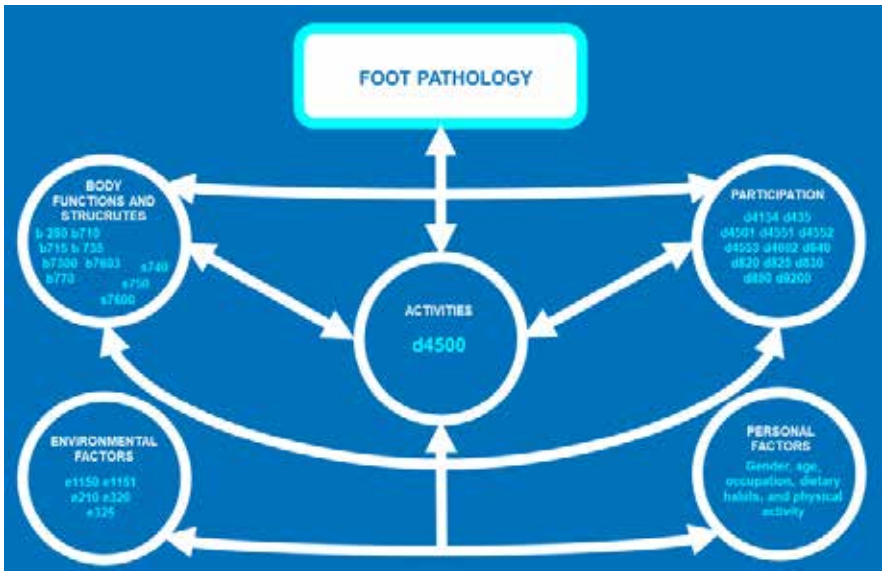
To bridge the gap between global classifications and daily clinical practice by building a concise, validated ICF subset for foot pathology that directly maps biomechanical foot impairments to standardized clinical evaluation scales.

Challenges

When analyzing the literature and choosing the ICF criteria, one can encounter difficulties such as comprehensively taking into account all factors affecting foot health: these are not only structural changes in bones and joints, but also lifestyle, level of physical activity and preferences when choosing shoes, as well as the social environment that supports or restricts.

Resolution

We successfully designed a concise ICF subset consisting of 28 core codes spanning all major components: Body Functions (b), Body Structures (s), Activities and Participation (d), and Environmental Factors (e) (Dubovikhin... pp. 4-5).
Comprehensive evaluation matrices were built to mathematically link qualifiers (0 to 4) with clinical tests, podometry coefficients, and specialized validated questionnaires.
Constructing a categorical profile using ICF codes allows for accurate identification of a patient's current problems by matching each ICF category with an appropriate assessment scale. This approach facilitates standardized assessment and personalized rehabilitation planning for patients with foot pathology.



Link or QR code

For further information. Links to final reports and presentations.

What was learned

Working with the ICF in the initial stages requires time and attention for a comprehensive assessment. In the future, this changes medical thinking and you begin to consider a person as a bio-psycho-social model. This significantly improves the quality of work.

Next steps

One of the next steps in my work will be the active implementation of the selected ICF criteria in the practice of doctors in clinics.
Moreover, all the results of the work will be implemented in the educational process for residents of rehabilitation specialists, instructors and occupational therapists.

Acknowledgements

I would like to thank Catherine Sykes and all the course coaches Stefanus Snyman, Huib Ten Napel, Michelle Janse van Rensburg, Haejung Lee.

Thanks also to my supervisor from Kazakhstan, Naila Sheveleva.

ICF EDUCATION

ICF-based assessment of Contextual factors influencing exercise participation among Indian postmenopausal women: A Cross-sectional Study

Group: March 2020

Dr. Mahima Shah (PT)[1] ,Dr.Mayur Revadkar (PT)[1] , Catherine Sykes[2] ,Dr.Pothiraj Pitchai(PT)[1]

1] K.J.Somaiya College of Physiotherapy, Mumbai, India.
2] University of Sydney, Australia.

Abstract This cross-sectional study finds out the various environmental and personal factors that may influence exercise participation of Indian postmenopausal women using a structured self-made questionnaire which is based on the ICF framework.

Backgound

- Menopause is the period in which women face a lot of changes in their bodies.
- Joint and muscle pain, mood swings, insomnia, stress and/or urge incontinence, osteoporotic symptoms, depression, and obesity are amongst the most common health issues faced by these women.
- Physical activity can be used as a potent tool for health promotion and disease prevention even in postmenopausal women.
- Since ICF provides a conceptual framework that can be used to gather information that is applicable to health care, including prevention, health promotion and improvement of participation by removing or modifying hindrances and encouraging social supports and facilitators, a structured questionnaire was formulated using the ICF framework.

Inciting incident

- Indian women are generally found to have a schedule which mainly includes fulfilling either their professional, household or sometimes both the responsibilities, and are found to be less focused on their own health. Due to the exact same thing clinically also it is found that they have very little compliance to regular exercise plan.
- This led to our study idea, to find out the common barriers to exercise participation in women by using a structured questionnaire.

Aspiration

- To encourage women to be physically active and have regular participation in physical exercise will help prevent symptoms that affect quality of life after menopause and thus knowing what are factors which restrict them in doing so becomes important.
- To target the factors, modify or develop strategies to provide better health care service, design realistic treatment plans and thus improve compliance to exercise.

Challenges

- Formulating interview narratives in ways that could encompass most of the domains in ICF-framework.
- Interviewing the study participants about some of the details like e.g. whether their family is supportive if she wants to join some physical activity class, about their socioeconomic status etc., required a smooth conversation, explanations and building trust.

Resolution

After interviewing 384 females who fulfilled the inclusion criteria following were the results:

- Both environmental and personal barriers affected participation of postmenopausal women in sufficient amount of physical activity or exercise.
- But statistically it was found that personal barriers (80.1%)were more significant than environmental barriers.
- Amongst personal barriers it was found that fear of injury(89.5%), lack of skill(88.5%), health condition(77.5%) and personal opinion(76.5%) were the most common barriers.
- Most common environmental barriers found in this study were attitude (89%), followed by natural and human-made changes to environment(68%) and support and relationships(65.5%)
- Majority of the study population was influenced by the opinion or beliefs of the women belonging to their age regarding participation in physical exercise, accounting it as the most common environmental barrier under Attitude.

Link or QR code

For futher information contact:
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What was learned

- Treatment plans should be customized, taking into consideration the various contextual factors to enhance its compliance.
- Modifiable risk factors e.g. sedentary lifestyle, that can lead to multiple ailments post menopause such as obesity, cardiovascular disease, insulin resistance etc. can be targeted when a physical therapist becomes aware about the what actually hinders exercise participation in a patient of this age group.

Next steps

- Encouraging physiotherapists to make use of ICF-framework for targeting environmental and personal barriers specifically before formulating a treatment plan and keep in mind that our end goal is to improve the overall quality of life.
- Use of ICF- based assessment tools that are standardised and validated should be encouraged. Such tools can be developed and validated for use across various age groups.

Acknowledgements

Study participants for their contribution

K. J Somaiya college of Physiotherapy for the institutional support

ICF EDUCATION

ICF based assessment of falls in elderly population- An outline of upcoming project

Course: April 2026

Amita Aggarwal [1] , Thomas Maribo [2] , Catherine Sykes [3] , Haejung Lee [4]
1. MMIPR, MM(DU), Mullana-Ambala
2. Aarhus Universitet, Denmark
3. University of Sydney, Australia
4. WHO-FIC Collaborating Centre in the Republic of South Korea

Abstract ICF assessment under six components, further chapters and qualifiers can add to the scope of healthcare professionals' understanding of falls and their risk factors.

Backgound

Healthcare providers need ongoing activities and training to screen for fall risk among the elderly.

With some studies developing questionnaires for the same, validation aspects of the construct are needed.

Inciting incident

With high global prevalence of falls, the consequences of falls can be devastating for older adults.

Aspiration

- To reduce the incidence of falls at homes, hospitals or in the outside environment.
- Identifying the factors affecting the safety of older adults, making them prone to falls

Challenges

- Developing a questionnaire to assess fall risk among community-dwelling older adults requires consultation with subject-matter experts, a literature review, and patient pilot data.
- Obtaining timely ethical permission from the present institute to conduct a study among older adults.

Link

https://pubmed.ncbi.nlm.nih.gov/?term=ICF+Assessment+and+Falls&size=200

Resolution

- Identifying the gaps in framing questionnaire from identifying the sources of information, possibly subject experts, literature review and target population interview.
- Using the ICF assessment, the questionnaire will explore and highlight the role of six ICF components and their correlation with falls.
- Appearing for the ethics committee after the feedback from coaches on the project.

What was learned

Use of ICF framework and its neutral language which is not about diagnosis but people functioning
Also, for a literature review conducted across three databases, PubMed, Scopus and Embase using Search: **ICF Assessment AND Falls**
Filters: **English, Humans**
a total of 10 relevant articles meeting the defined inclusion criteria were read for full text.
Across these studies, the study populations were not well defined.

Next steps

- Finalizing synopsis with a clearly defined research question and inclusion exclusion criteria.
- Identifying all the sources of information to develop a questionnaire.
- Preparing a questionnaire based on ICF Components.

Acknowledgements

I sincerely thank the ICF facilitators, Course coaches, and team for their continuous guidance and feedback on the submitted drafts.

Enhancing Community Stroke Rehabilitation in Hong Kong through a Context-Specific ICF Core Set

Course: Oct 2024

Chi Keung Yeung[1,2], Ping Kin Wong[1], Ka Man Cheng[1], Shui Sang Wong[1], Hon Yee Cheng[1], Wai Yee Cheung[1], Choi Wa Ling[1]
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2. School of Health Sciences, University of Notre Dame Australia

Abstract This project developed a context-specific International Classification of Functioning, Disability and Health Core Set for stroke survivors receiving community-based rehabilitation services in Hong Kong. Using a four-round Delphi process, a concise 41-category ICF Core Set was developed to support holistic assessment, interdisciplinary communication, and person-centred rehabilitation planning. The project demonstrated how the ICF can enhance participation-focused community rehabilitation and improve the relevance of stroke rehabilitation within the Hong Kong context.

Backgound

Stroke survivors in Hong Kong often experience long-term difficulties in mobility, self-care, communication, and community participation. Existing assessments may not fully address environmental and participation needs in community rehabilitation. The International Classification of Functioning, Disability and Health offers a holistic framework, but existing stroke core sets are often too lengthy for routine community practice

Challenges

- Existing ICF Stroke Core Sets were too comprehensive for routine use.
- Limited focus on community participation and environmental barriers.
- Need for a shared rehabilitation language across disciplines.
- Hong Kong's dense urban environment created unique mobility and participation challenges.

What was learned

The ICF can serve as a practical framework for interdisciplinary community rehabilitation. Digital integration of the ICF improved communication, case coordination, and visualisation of patient progress. Participation and environmental factors are essential for stroke rehabilitation in Hong Kong. Family support and assistive technology are highly relevant within the local cultural and urban context. Real-world application improved the relevance and usability of the ICF Core Set.

Inciting incident

Although different disciplines used various assessment tools, there was no shared framework to guide holistic, person-centred rehabilitation planning across professions.

This highlighted the need for a practical ICF-based assessment framework that could improve interdisciplinary communication and better reflect the lived experiences of stroke survivors in Hong Kong.

Our multidisciplinary community rehabilitation team observed that many stroke survivors continued to experience unmet needs after hospital discharge, particularly in:

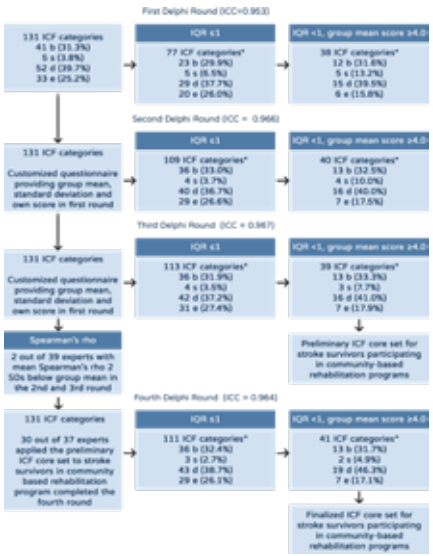
- community participation
- mobility within Hong Kong's dense urban environment
- caregiver support
- access to assistive technology
- psychosocial adjustment
- meaningful life participation

Resolution

A four-round Delphi process involving multidisciplinary rehabilitation professionals developed a final 41-category ICF Core Set for community stroke rehabilitation in Hong Kong. The final set included domains related to mobility, self-care, community participation, assistive technology, transportation, and family support.
To facilitate practical implementation, we also developed an online ICF-based case management platform. The system allows multidisciplinary teams to record, visualise, and share ICF assessments in real time, improving interdisciplinary communication, documentation consistency, and person-centred rehabilitation planning.
This integration of the ICF framework into digital practice enhanced holistic community rehabilitation and supported participation-focused care.

Next steps

- Expand validation across rehabilitation organisations.
- Integrate the ICF Core Set into electronic rehabilitation systems.
- Develop ICF-based outcome monitoring tools.
- Support wider ICF implementation in rehabilitation services and policy in Hong Kong.



Aspiration

This project aimed to:

- develop a concise and clinically feasible ICF Core Set for stroke survivors in Hong Kong;
- promote holistic, person-centred rehabilitation;
- strengthen multidisciplinary collaboration through a common language of functioning;
- improve assessment, goal-setting, intervention planning, and outcome evaluation;
- support community reintegration and quality of life after stroke.

Link

Publication:
Yeung CK, Wong PK, Cheng KM, Wong SS, Cheng HY, Cheung WY, Ling CW. *Development of the International Classification of Functioning, Disability and Health (ICF) core set for stroke survivors in community-based rehabilitation settings in Hong Kong*. Disability and Rehabilitation. 2026;48(9):2670–2684.
DOI:10.1080/09638288.2025.2557499

Acknowledgements

We thank the multidisciplinary rehabilitation professionals and community rehabilitation teams who contributed to the Delphi process and implementation of this project, as well as Yang Memorial Methodist Social Service and the ICF Facilitator Programme for their support.

ICF EDUCATION

'Integrating Case-Mix Model & International Classification of Functioning, Disability & Health into Electronic Health Record systems: Enhancing Stroke Rehabilitation through Personalized care, Predictive analytics & Resource optimization'

Group: October 2024

Isha Akulwar-Tajane
MPTh Neurosciences, PhD Scholar, Associate Professor in Kinesiotherapy and Physical Diagnosis,
K J Somaiya College of Physiotherapy,
Mumbai, Maharashtra, India

Abstract Integration of the International Classification of Functioning (ICF), Case-Mix Model (CMM), and Electronic Health Records (EHR) is proposed as an evidence-based framework to improve functional outcomes, continuity of care, and resource optimization in stroke rehabilitation. This approach is intended to address the growing complexity of stroke rehabilitation and help to improve personalised care, resource allocation, predictive accuracy, and clinical decision-making by providing a comprehensive, evidence-based solution.

Background

- Stroke is the leading cause of adult disability worldwide, requiring long-term, multidisciplinary rehabilitation. Current healthcare systems lack standardised frameworks for documenting functional outcomes and environmental influences on recovery.
- ICF is a bio-psycho-social model widely acknowledged in rehabilitation medicine and a promising direction in patient-centred care. ICF classification reflects assessment at the level of impairments, activity limitations, and participation restrictions, and adding qualifiers helps study health outcomes more objectively and precisely.
- The ICF provides a validated assessment framework for understanding disability, while EHR systems enable longitudinal data capture and interoperability.
- Case-Mix Models facilitate grouping of patients based on functional status, which in turn helps identify intervention targets, predict outcomes, and inform resource utilisation.
- EHR with clinical decision support and predictive analytics helps in planning it. Technical innovation and standardisation in healthcare record systems, translating into improved personal and public health is emerging and promising.

Inciting incident

Epidemiological and clinical evidence indicate that although stroke survival rates have improved, a substantial proportion of patients experience long-term disability and are lost to follow-up due to inadequate documentation of functioning and poor continuity of rehabilitation care. This highlighted a critical gap in existing health systems, which predominantly focus on acute medical management rather than longitudinal functional recovery.
There is a need for rehabilitation-relevant classification for clinically similar groups of individuals based on functional outcome measures, and documentation that predicts resource requirements, use and outcomes. Nascent tools indicate the use of ICF for case-mix models; however, it is far from established, rather than existing models. EHR is in its infancy stage, at least in India. Despite reported benefits, the adoption of EHR is low; the availability of an extensive or fully functional EHR is scarce.
Individually, all three viz. ICF, EHR & CMM have a central premise to support quality health care; while they also share common goals and strategies. Thus, it can be hypothesised that by integrating all of them this potential can become manifold.

Aspiration

This study aims to develop a template for an EHR system with the integration of two key frameworks- CMM and the ICF, to be adopted for stroke rehabilitation.

The specific objectives are-
- To standardize the assessment of functioning across impairment, activity, and participation domains
- To enable predictive analytics for prognosis and individualised care planning
- To optimise healthcare resource allocation using case-mix stratification
- To enhance patient-centred, bio-psycho-social rehabilitation models

Challenges

- Limited awareness and implementation of ICF in clinical practice
- Limited knowledge of CMM
- Financial and infrastructural barriers to EHR adoption
- Increased documentation burden perceived by healthcare professionals
- Lack of interoperability and standardized data systems, need to revise medical rehabilitation terminology and coding standards
- Need for coordinated multidisciplinary collaboration within and across healthcare settings

A key decision involved transitioning from fragmented, disease-centred systems to an integrated, function-based model despite implementation constraints.

Resolution

An integrated framework combining ICF-based assessment tools, Case-Mix classification, and EHR infrastructure was developed.
The theoretical construct for this framework and design was derived from -
- Rehab-cycle
- ICF-based documentation tools - ICF core set for stroke, ICF Qualifiers
- WHO Disability and Assessment Schedule 2.0 (WHODAS 2.0)
- Generic set for rehabilitation measurement
- Standardised Stroke management guidelines
- EHR Standards by the Government of India (updated 2016)
- It also employs ICD-11 and ICHI, representing an ideal modular set of classification systems.

Important capabilities/functionalities:
- Clinical decision making using an individualised contextual approach (ICF)
- Categorising individuals based on functional outcome measures (Case- Mix Model)
- EHR with artificial intelligence has predictive analytical ability; interoperability with other systems, such as Clinical Decision Support, m-Health technology, and wearable devices, enhances its utility.

This model supports standardised documentation, individualised rehabilitation planning, and data-driven clinical decision-making. It enables tracking of functional recovery, improves continuity of care, and facilitates efficient resource utilisation.
The framework also establishes a foundation for outcome research and policy development. This integrative model has the potential to transform health care settings and health information systems.

Link or QR code

- WHO ICF Framework: https://www.who.int/standards/classifications/international-classification-of-functioning-disability-and-health
- Indian EHR Guidelines: https://esanjeevani.mohfw.gov.in/assets/guidelines/ehr_guidlines.pdf
- https://www.icf-casestudies.org/introduction/introduction-to-icf-based-documentation-tools-and-rehab-cycle-2/introduction-to-icfbased-documentation-tools-and-rehab-cycle
- https://www.jmir.org/2005/1/e3/
- https://www.tandfonline.com/doi/full/10.1080/09638288.2018.1431812
- https://pubmed.ncbi.nlm.nih.gov/12392234/
- https://scispace.com/papers/icf-linking-rules-an-update-based-on-lessons-learned-4m813zsi50
- https://pubmed.ncbi.nlm.nih.gov/18762742/

What was learned

- Bio-psycho-social approaches improve rehabilitation assessment and outcomes
- Standardized frameworks enhance transparency and comparability in clinical data
- EHR systems enable predictive analytics and longitudinal outcome tracking
- Successful implementation requires alignment with clinical workflows and adequate training

Implication: Incremental implementation with multi-stakeholder engagement and collaboration is critical for sustainability.

Next steps

Clinical and statistical validation of the EHR model against the anticipated benefits
- Pilot implementation and clinical validation in hospital and post-acute settings through multicentric studies
- Development of regional and national rehabilitation databases
- Establish benchmark norms for clinical indicators and integration of artificial intelligence for predictive modeling
- Ensuring compliance with data security, ethical, and legal standards
- Integration into healthcare policy and quality assurance programs
- Scaling for national and international adoption with contextual adaptation

It is assumed that it will be a meaningful & practical system enabling data-driven healthcare delivery that can be used by health policy quality assurance evaluation outcomes. Ultimately, the model has the potential to enhance stroke rehabilitation outcomes, improve patient quality of life, and contribute to healthcare system efficiency, making it a crucial area of investigation in modern healthcare.
Further research is directed to justify the use of ICF and CMM in resource usage and recovery monitoring in long-term rehabilitation of patients with stroke.

The Rehab-Cycle® and the corresponding ICF-based documentation tools

Acknowledgements

This work is based on the International Classification of Functioning, Disability and Health (WHO, 2001) and supported by evidence from rehabilitation science and health informatics literature.
I sincerely thank the ICF Facilitators-Course coaches for their guidance and contribution to advancing the ICF framework and its role in modern rehabilitation.

ICF Facilitators

Deceptively familiar: why the International Classification of Functioning and Disability's (ICF) resemblance to occupational therapy kept the profession invisible but also can enhance its visibility

Building a curriculum framework using the ICF, the OTPF-4, MOHO and the VdTMoCA to produce graduates who reason as occupational therapists and report in ICF

Matty van Niekerk

Department of Occupational Therapy, School of Therapeutic Sciences, Faculty of Health Sciences, University of the Witwatersrand, South Africa

Group: 2025 / 2026 · Coaches: Huib ten Napel, Stefanus Snyman, Catherine Sykes, Michelle Janse van Rensburg, Haejung Lee

Abstract

This project demonstrates that by building the ICF into an undergraduate curriculum as its structural spine: the ICF as interprofessional scaffold, the OTPF-4 as domain map, and MOHO with the VdTMoCA as theoretical engine — is able to produce graduates who reason occupationally and report in ICF.

Background

- Occupational therapy and the ICF describe the same territory in almost the same words. That resemblance is comfortable, but also costly. Because the ICF looks like what we already do, occupational therapists take it in their stride without ever adopting its language and the profession's contribution stays unreadable to health information systems, interprofessional teams and funders.
- WFOT made ICF literacy a graduate competency in its 2016 minimum standards for occupational therapy education.
- South Africa's National Health Insurance (NHI) will require ICF-based functioning data across all health professions.
- Surveys in the Global North and South show occupational therapists are interested in the ICF, but clinical implementation remains inconsistent.
- Occupational therapy already reasons biopsychosocially — which is precisely why the ICF feels like something we have already done.
- The ICF is theory-neutral: a classification, not a model of practice. It is designed to be supplemented by profession-specific theory.

Inciting incident

Reading the ICF as an occupational therapist produces a strong sense of recognition: person, environment, activity, participation, facilitators, barriers. The vocabulary is ours. The meanings are not.

- ICF participation: involvement in a life situation — a neutral behavioural descriptor.
- OT participation: engagement that is inseparable from personal meaning and role importance.

Because the terms look interchangeable, nothing gets translated. Our records carry language the health system cannot read, and our contribution disappears from the data. The problem is not disagreement with the ICF. It is unexamined familiarity.

Aspiration

A conceptual framework for a four-year undergraduate occupational therapy degree in which the ICF is the interprofessional scaffold, the OTPF-4 the domain map, and MOHO — complemented by the VdTMoCA — the theoretical engine.

Graduate outcome: fluent in ICF language for NHI reporting, and interprofessional collaboration, without losing the occupational reasoning that defines the profession.

Challenges

- Superficial resemblance breeds false equivalence — the most clinically consequential error in ICF use by occupational therapists.
- The ICF deliberately does not classify personal factors — precisely the territory occupational therapy claims.
- The ICF gives a snapshot of functioning. It does not theorise how a person moves from one qualifier to another.
- The opposite failure is equally real: graduates who can code but cannot reason clinically.
- No standardised instrument links occupational therapy constructs to ICF qualifier change over time.
- Curriculum time is finite. The ICF must be embedded in clinical reasoning, not added alongside it.

Resolution

A curriculum rationale document in two parts.

Part 1 — Four domains. The ICF, MOHO and OTPF-4 compared across environment, the person, body functions and structures, and activities and participation. Every comparison carries a Curriculum implication column stating what a student must understand to use all three frameworks fluently and simultaneously.

Part 2 — The feedback loop. Change is situated in systems theory: the volitional cycle of anticipate, choose, experience, interpret. The therapist calibrates the just-right challenge (VdTMoCA), the client experiences success, volition is reshaped, participation increases — and ICF qualifiers improve.

A twelve-concept terminology map (below) is taught explicitly and early, so that translation becomes a named graduate competency rather than an assumption.

Link or QR code

Full assignment, the four domain comparison tables and the complete terminology map are available from the author.

matty.vanniekerk@wits.ac.za

[QR code to be inserted]

What was learned

- Resemblance, not difference, is the barrier to ICF adoption in occupational therapy.
- The ICF's silence on personal factors is a design decision, not an oversight — and it is exactly where occupational therapy contributes what no other profession can.
- Shared words must be taught as false friends: participation, occupation, performance, capacity, role and habit all diverge.
- The ICF describes the snapshot; occupational therapy theory explains the change. Health systems need the first for accountability and the second for professional credibility.
- Framed as opportunity rather than compliance burden, the ICF makes occupational therapy legible without diluting it.

Next steps

- Map ICF competencies module by module across the four-year degree.
- Specify the graduate ICF competencies required for NHI reporting.
- Develop a longitudinal measure linking VdTMoCA level movement to ICF qualifier change over time.
- Test transferability to other professions and to other ICF-mandated health systems.
- Publish the curriculum rationale and invite critique from occupational therapy educators.
- Extend the terminology map into teaching materials and assessment rubrics.

Acronyms

- MOHO – Model of Human Occupation
- OTPF-4 – Occupational Therapy Practice Framework
- VdTMoCA – Vona du Toit Model of Creative Ability
- WFOT – World Federation of Occupational Therapists

Acknowledgements

ICF Facilitator Course coaches: Huib ten Napel, Stefanus Snyman, Catherine Sykes, Michelle Janse van Rensburg and Haejung Lee.

Department of Occupational Therapy, School of Therapeutic Sciences, University of the Witwatersrand.

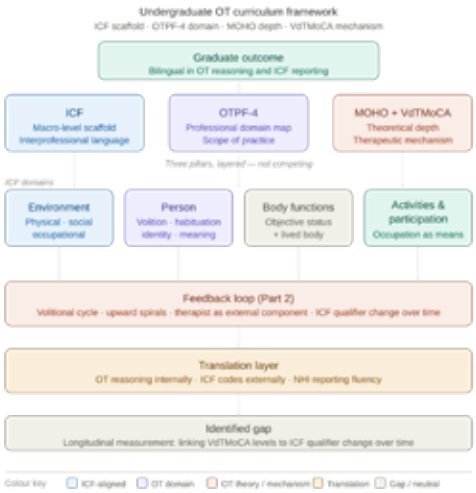
AI use declared: NotebookLM and Claude.ai were used for conceptual analysis, editing and figure generation, aligned to Nicmanis and Spurrier (2025).

False friends: where shared words diverge

Concept	In the ICF	In occupational therapy	Why the difference matters
Participation	Involvement in a life situation; d-codes, same taxonomy as activity	Engagement in broad life areas, inseparable from personal meaning and role	Treating these as equivalent is the most clinically consequential error
Occupation	No equivalent; approximated only through composite d-codes	The central organising concept — the means and the end of therapy	Its absence is a design choice; OT must supply it, not assume it is there
Performance	A severity score: what a person does in their real environment (qualifier 2)	Quality of doing: volition, habituation, capacity and environment interacting	Identical word, substantially different construct
Capacity	Highest probable ability in a standardised environment (qualifier 1)	Objective components plus the subjective lived body	The qualifier cannot capture felt capability
Role	Not classified; implicit within d8 and d9	Internalised identity within the habituation system	A person can perform role-tasks without internalising the role — invisible to the ICF
Habit	Not a distinct construct; implicit in d230, carrying out daily routine	Automatic response to familiar cues; a primary clinical target	The ICF sees the behaviour, not its automaticity or its disruption

Adapted from WHO (2001), Taylor (2008) and AOTA (2020). The full map in the assignment covers twelve concepts.

The curriculum framework



Three pillars, layered — not competing. The ICF names what can be classified; the OTPF-4 organises the domain; MOHO and the VdTMoCA explain and drive the change.

ICF EDUCATION

ICF as a catalyst for participation and social inclusion

Sharize Schaerer OT
Rita Henn and Partners, JHB South Africa

Course: May 2024

Abstract This project explores how the ICF can be used as a critical lens to review the nature of rehabilitation intervention; as well as a tool to enable rehabilitation professionals to look beyond independence as an aim - to participation and social inclusion.

Backgound

Despite the ICF introducing psychosocial concepts to our understanding of health states, many rehabilitation professionals' intervention is often still largely aimed at addressing impairments and activity limitations.

Although this is appropriate at the acute stage, ethical practice necessitates a shift towards real participation and due consideration of 'Environmental factors' especially at the post-acute and chronic phases of an individual's recovery journey, when some residual impairments are unlikely to respond to further intervention.

The introduction of tools to measure Participation or Environmental Factors may facilitate a more holistic intervention.

Inciting incident

In my clinical practice as an OT working in the field of acquired brain injury (ABI), I frequently encounter individuals whose personal goals are framed in relation to impairments, long after the acute phase of treatment.

This raises the question whether 'Participation' and 'Environmental factor' components of the ICF are adequately considered when planning the interventions. If so, are we as clinicians, not inadvertently contributing to a medicalized view which sees disability exist as a direct result of biological defects rather than as a consequence of environmental barriers?

Aspiration

The purpose of this project was to use the ICF for development of a tool to help Rehabilitation therapists identify intervention targets at participation level. In addition, to draw attention (of patient and therapist alike) to Environmental Factors which may be impacting on participation and social inclusion.

Challenges

There exists some methodological and conceptual challenges in the measurement of the 'Activity' and 'Participation' constructs.

Given the broad cultural and socio-economic differences between individuals, it is difficult to identify which are the most relevant participation and/or environmental factors to include in a possible measure.

Developing a reliable outcome measure for assessing participation and its influencing environmental factors was beyond the scope of this project.

Resolution

A literature review was conducted to investigate existing measures of participation and/or community integration.

A brief poll regarding the use of such measures was conducted amongst therapists working at 12 different out-patient therapy practices around Gauteng. No single outcome measure / assessment tool was universally used in the post-acute, out-patient therapy environment in the practices surveyed.

Two measures most commonly used according to the literature, the WHODAS II as well as a South African developed measure and an OT specific measure (COPM) was mapped against the ICF Core set for TBI, Landrum's Rehabilitation Outcome levels (Community and Productive integration), and UNCRPD's articles relevant to those.

Based on perceived shortcomings found in existing measures, a questionnaire was developed and piloted with 5 clients in either the post acute or chronic phases post ABI

What was learned

The ICF can be used to evaluate the extent to which tools measure the domain which they claim to measure through a mapping exercise.

There appears to be inadequate consideration of Environmental Factors in the majority of tools measuring participation.

It is valuable to include a subjective component in such a measure, as individuals who may be considered well integrated in some areas, may still express dissatisfaction and social exclusion if they are not integrated in areas that matter to them.

Next steps

To conduct another pilot-project using existing tools which consider Participation and Environmental Components, along side a subjective measure. This will further inform whether combining existing tools could adequately measure participation, satisfaction with participation, including impacting environmental factors; or whether there is a need for the development of a new tool relevant to the South African context.

Extract of mapping exercise

Landrum's Rehab. Outcome Levels	UNCRPD	ICF Domain	ICF Code	ICF Description	Comprehensive Core set for TBI	CIQ	WHO DAS II
Level IV : Community Integration	Article 20: Personal Mobility	d4 Mobility	d460	Moving around different locations			1
			d470	Using transport	1	1	
		d6 Domestic life	d630	Preparation of meals	1	1	
			d640	Doing housework	1	1	4
	Article 30: Participation in cultural, sport and recreation	d9 Community, Social and Civic life	d920	Recreation and leisure	1	1	1
			d930	Religion and spirituality	1		
	Article 29: Public al life		d940	Human rights			1
Level V : Productive integration	Article 27: Work and Employment	d8 Major life areas	d850	Remunerative employment	1	1	1
			d855	Non- Remunerative employment	1	1	1

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Chung, P., Yun, S. J., & Khan, F. (2014). DOI: 10.2340/16501977-1257
Watermeyer, B. P. (2024). doi: https://doi.org/10.4102/ajod.v13i0.1505
Whiteneck, G. P., & Dijkers, M. P. P. (2009). DOI: 10.1016/j.apmr.2009.06.009

ICF EDUCATION

Development and Validation of International Classification of Functioning, Disability and Health (ICF) based assessment for Middle aged individuals with Primary Sarcopenia

Course: April 2026

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Abstract Sarcopenia is commonly assessed through muscle mass, strength and selected physical performance measures. However, these measures may not fully represent its impact on everyday functioning. This project aims to develop an ICF-based assessment for middle-aged individuals with primary sarcopenia, integrating body functions, activities, participation and contextual factors relevant to the Indian population.

Backgound

Although sarcopenia is predominantly associated with older adults, muscle decline may begin during middle age. Existing tools such as SARC-F, SARC-CalF and SarQoL provide important information but have limitations in capturing participation and contextual influences. The ICF offers a bio-psycho-social framework to understand functioning more comprehensively and holistically.

Challenges

The major challenge was shifting from a predominantly disease-focused and predefined approach towards a bottom-up ICF perspective. Questions also emerged regarding the exclusion of comorbidities, the role of recurrent falls and the use of Cronbach's alpha for a multidimensional assessment. Identifying relevant Indian contextual factors added another methodological challenge.

What was learned

The process helped me understand that using the ICF is not simply about assigning ICF codes to existing clinical measures.
It requires understanding functioning as a multidimensional concept and considering activities, participation and functions in context.
I also learned that methodological decisions must be aligned with the purpose and structure of the assessment.

Inciting incident

The initial research plan proposed using the ICF Core-sets as the primary framework, followed by Delphi consensus, pilot testing and Cronbach's alpha. Feedback from ICF course coaches prompted critical reflection on whether this approach adequately represented middle-aged adults with primary sarcopenia and the multidimensional nature of functioning.

Resolution

The research approach was revised, to begin with literature review and examination of existing sarcopenia assessments, followed by mapping their content-items to ICF domains. Missing areas of functioning will then be identified, including Indian contextual factors.
Delphi consensus will subsequently be used to establish relevant categories before assessment development and testing.

Next steps

The next phase will focus on completing the ICF mapping of existing sarcopenia assessments and identifying gaps in functioning.
Indian lifestyle, occupational, cultural and environmental influences will be explored. Relevant categories will then undergo interdisciplinary Delphi consensus, followed by assessment development, pilot testing and appropriate evaluation of measurement properties.

Aspiration

The aspiration is to develop an assessment that moves beyond measuring muscle impairment and selected physical abilities.
The assessment should capture how primary sarcopenia influences everyday activities, participation and functions within real-life contexts. The assessment should also reflect Indian lifestyle, occupational, cultural and environmental factors relevant to middle-aged adults.

Mapping of ICF Components in Primary Sarcopenia

Acronyms

SARC-F - Strength, Assistance with walking, Rise from a chair, Climb stairs and Falls
SARC-CalF -calf circumference (CC) combined with SARC-F
SarQoL -Sarcopenia & Quality of Life

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I would like to thank my coaches Catherine Sykes, Thomas Maribo and all the course coaches Stefanus Snyman, Huib Ten Napel, Michelle Janse van Rensburg, Haejung Lee. I also thank my Guide Dr. Manoj Abraham M, Co-guide Dr. Franklin Shaju MK, and Doctoral Committee Members, KG College of Physiotherapy, Coimbatore.

ICF EDUCATION

KNOWLEDGE, PERCEPTION, PRACTICE, BENEFITS, BARRIERS, AND CURRICULUM INTEGRATION OF ICF AMONG PHYSIOTHERAPY STUDENTS

Course: April 2026

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Abstract The International Classification of Functioning, Disability and Health (ICF) provides a bio-psycho-social framework for holistic rehabilitation. This project assessed knowledge, perception, practice, perceived benefits, barriers, and integration of ICF among 128 physiotherapy students across different academic levels. The findings demonstrated progressive improvement in ICF knowledge and application with increasing academic and clinical exposure.

Backgound

ICF supports physiotherapists in understanding functioning beyond diagnosis by considering body functions, activities, participation, and contextual factors. It promotes holistic assessment, clinical reasoning, patient-centred rehabilitation, and interdisciplinary communication. However, limited curricular exposure and inadequate practical training may restrict students' confidence and consistent application of ICF during clinical practice.

Challenges

Variation in ICF exposure across academic levels emerged as an important challenge. Bachelor Physiotherapy (BPT) IV-year students demonstrated comparatively lower knowledge and greater uncertainty, while interns and postgraduate students (Master Physiotherapy – MPT) showed better understanding and application. Participants also identified limited curricular exposure, inadequate practical training, documentation requirements, and time constraints as barriers.

What was learned

The project demonstrated a progressive trend in knowledge, perception, practice, recognition of benefits, and support for ICF integration from undergraduate to postgraduate levels. I learned that academic knowledge alone may not be sufficient for clinical implementation; meaningful exposure, practical training, clinical experience, and opportunities to apply ICF are important for developing confidence and competence.

Inciting incident

The project was initiated by the need to understand whether physiotherapy students were adequately prepared to apply ICF in clinical practice.
Previous literature highlighted limited knowledge, inconsistent use, insufficient curricular exposure, and inadequate practical training.
This created the need to explore students' knowledge, perceptions, practices, perceived benefits, barriers, and views on curriculum integration.

Resolution

A cross-sectional study (single centre) was conducted among 128 physiotherapy students:
- 42 BPT IV-year students,
- 46 interns,
- 20 MPT I-year students, and
- 20 MPT II-year students.

A structured self-administered questionnaire using a five-point Likert scale assessed knowledge, perception, practice, perceived benefits, barriers, and integration of the ICF framework.

Next steps

The next step is to strengthen ICF education from the undergraduate level through structured teaching, case-based learning, workshops, and supervised clinical application.
ICF concepts can be incorporated into clinical postings and documentation.
Future research should include larger, multicentre and interdisciplinary samples to further examine implementation and improve the generalizability of findings.

Aspiration

The aspiration was to understand how ICF knowledge and application change with academic progression and clinical exposure.
The project also aimed to identify students' perceptions of the practical benefits of ICF and their readiness for curriculum integration, ultimately supporting the development of physiotherapists capable of delivering holistic and patient-centred rehabilitation.

DOMAIN WISE MEAN SCORE

DOMAIN	BPT IV YEAR	BPT INTERNS	MPT I YEAR	MPT II YEAR	INTERPRETATION
KNOWLEDGE	3.06	3.34	3.60	4.03	Knowledge progressively increased from undergraduate to postgraduate students.
PERCEPTION	3.29	3.52	3.68	3.88	Students exhibited increasingly positive perceptions with advancing academic level.
PRACTICE	3.39	3.47	3.56	3.75	Clinical application of the ICF framework improved with greater academic and clinical exposure.
BENEFITS	3.43	3.58	3.76	3.71	Students increasingly recognized the benefits of the ICF framework for patient management and rehabilitation
BARRIERS	3.22	3.18	3.50	3.80	Awareness of barriers was greater among postgraduate students than undergraduate students.
INTEGRATION	3.71	3.86	3.95	4.20	Support for integrating the ICF framework into the curriculum was highest among MPT II Year students.

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I would like to thank my coaches Catherine Sykes, Thomas Maribo and all the course coaches Stefanus Snyman, Huib Ten Napel, Michelle Janse van Rensburg, Haejung Lee. I also thank my Guide Dr. Manoj Abraham M and participants of the study, KG College of Physiotherapy, Coimbatore.

ICF at 25: What the coaches think

Catherine Sykes[1], Stefanus Snyman[2], Huib Ten Napel[3],
Michelle Janse Van Rensburg[4], Haejung Lee[5], Thomas Maribo[6]
1. University of Sydney, Australia; 2. South African Collaborating Center;
3. Dutch Collaborating Centre; 4. University of the Witwatersrand, South Africa
5. Silla University, South Korea; 6. Department of Public Health, Aarhus University, Denmark

Abstract This page outlines the stories and experiences with ICF of the coaches on the ICF Facilitator Course. Each person has brought that experience to challenge the students on the course.

Huib ten Napel
Dutch Collaborating Centre, the Netherlands

Working for the Dutch National Council for Health, from 1992 I started being involved in the International Classification of Impairments, Disabilities and Handicaps (ICIDH) and the revision of the ICIDH. The Dutch Centre was responsible for revising the part of Functions and Structures Domains, which in 2001 finally resulted in the ICF.
Right from the 'birth', the ICF raised a lot of interest in several practices, such as clinical (nursing and physiotherapy, rehabilitation), research, education, policy making.
At first, we (Marijke de Kleijn and me) traveled all over the country to give ICF lectures and training. After a few years we decided to build our experiences into an ICF Course to facilitate others to become ICF Trainers, which started in 2008.
In 2017 Stefanus was approached to translate the ICF course into the English language to facilitate a wider audience. In 2018 we launched the ICF Facilitators Course to create our agents of change on Functioning.

Stefanus Snyman
Collaborating Centre in South Africa

Over 15 years, the ICF has become my framework for interprofessional education and collaborative practice (IPECP), taken up by South African universities, AfrIPEN and Interprofessional.Global. Through the mICF initiative, we developed concepts for recording functioning in a mobile application.
Today, with the interprofessional team at FIRE for Life, we use the ICF to help people worldwide reverse insulin resistance. Its biopsychosocial model gives medicine, dietetics, biokinetics, pharmacology, nursing, psychology, pastoral care and health coaching a shared map of functioning, making environmental and personal factors visible, shareable and actionable.
Building on facilitators, we address meals, family involvement, activity, stress, sleep, gut health and work–life balance.
Through the ICF facilitator course, we cultivate agents of change to advance person-centred care, data, policy and advocacy.

Catherine Sykes
University of Sydney, Australia

Disability classifications have been part of my career for many decades. Firstly, the International Classification of Impairments, Disability and Handicaps informed Master's level research. Then, I took part in the development and testing of ICIDH-2, to its endorsement as the ICF 25 years ago.
Highlights of ICF use in Australia include:

- Inclusion of ICF metadata standards in National Data Dictionaries.
- ICF enabled studies of unmet need for disability services.
- The Census including an ICF-based question on disability from 2006.
- Use of the ICF to inform the National Disability Insurance scheme.

On my ICF journey I have been accompanied by Australians Drs RH and RC Madden and EN Fortune, amongst many others in the WHO-FIC Network.

Michelle Janse van Rensburg
University of the Witwatersrand, South Africa

The ICF's contribution to health professions education is that it makes functioning teachable. At the University of the Witwatersrand in South Africa, it is now the framework for the recurriculation of our occupational therapy programme, shaping how we sequence learning and how students reason about functioning in context, anchoring what community service practitioners must actually do in the resource-limited settings where most of our graduates begin. At 25, the ICF's next frontier is the curriculum. If graduates enter a reforming health system already thinking in terms of functioning and context, person-centred practice becomes the default. The work ahead is generational: making sure the next cohort meets the framework in their training rather than discovering it mid-career, as I did.

Haejung Lee
Silla University, South Korea

For me, the ICF has shown how a common framework can grow from small educational and research initiatives into a nationwide approach. In Korea, this journey led to the adoption of an ICF-based national standard classification of functioning and disability (KCF-1), creating opportunities to connect information across health care, rehabilitation, social care, education, and national statistics.
The next challenge is to move beyond formal adoption toward consistent use in practice, through education, updated terminology, standardised assessment, and comparable data.
My hope is that the ICF will increasingly serve as a shared language that supports person-centred services and evidence-informed national policy.

Thomas Maribo
Aarhus University, Denmark

The ICF has fundamentally changed how I understand rehabilitation.
ICF gave us a framework and a common language for looking beyond disease and impairment to understand how people function in their everyday lives, shaped by both health conditions and contextual factors.
Twenty-five years later, however, I believe we have not yet realised its full potential.
We routinely monitor mortality and morbidity but know far less about how people function and whether healthcare and rehabilitation improve their functioning.
Our next step should be ambitious: functioning should become a routinely available health indicator alongside mortality and morbidity.
The ICF gave us the conceptual foundation; our challenge now is to make functioning systematically measured, visible and used.